

# MICHIGAN FARMER

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### FARM NOTES.

#### TO OUR BROTHER PATRONS AND FARMERS.

Just a few personal words now to our brother farmers, and members of the Grange in particular. It is with a great deal of satisfaction that we help edit this issue, the initial appearance of the MICHIGAN FARMER as the official organ of the Michigan State Grange.

Ever since the writer became associate editor of the FARMER he has been doing all he could (though it has been but one small drop in the bucket), to bring together into one family, so to speak, the following forces or organizations: These are the MICHIGAN FARMER, the Farmers' Clubs, the Grange, the Agricultural College and Experiment Station.

Brother farmers, do you realize what a mighty force we have in our grand combination of the above, all working in our interest in various ways? Then let us be up and doing with all our might, to attain to still greater heights yet unattained in the varied and material advancement of our avocation as tillers of the soil.

Ever reader of the FARMER should "belong to" or "join" one or more of the above organizations, and then put a willing shoulder to the wheel. In union there is strength, and our union was never so strong as now, as will be apparent to every intelligent farmer who carefully peruses this issue of the FARMER.

Kind reader, if it so happens that you are not one of the above family, and do not take the FARMER, do you not feel it your duty to "take a good thing" and help push it along? We hope every reader of this issue, who is already a subscriber, will carefully look it over. Then if he is an ambitious, progressive farmer he is almost sure to fall into line.

The cry of the farmer everywhere has been to organize, to combine for the mutual, mental, social and financial improvement of, not only the farmer, but all humanity. The MICHIGAN FARMER now is the State organ, so to speak, of all the agricultural forces of the State, and we conscientiously believe every farmer in the State should take it and read it.

Many sample copies of this issue will go to farmers who do not take the paper. To such we say, "Come into the FARMER fold"—join the Grange or Farmers' Club—or both—and partake of the benefits which shall most assuredly accrue to every earnest and zealous member thereof.

To our brother Patrons, who now receive their first issue of "our new Grange paper," we extend a hearty welcome. We extend this welcome especially in these "Farm Notes" for a special reason: We want you to write us something about your farm experience for publication in these columns.

In the exuberance of good feeling and felicity over the fact that we patrons have a paper at last, "founded upon a rock," do not let your ardor cool, but sit down and write us about your general farming operations, plans for next season's campaign, etc.

Do you keep a dairy? Are you satisfied with present conditions? If not, what is the trouble? Tell us something about your methods. Are you interested in poultry? We are very much so, and should be pleased to hear about breeds, methods of care and feed, house construction, etc.

To our brother Patrons who have not read the FARMER in recent years, we wish to state that all our writers and correspondents are practical farmers. Each issue of the FARMER has been, and will continue to be an intensely practical "farmers' institute." Every reader has a rightful share in the discussions, and we ask you to make haste to enter "the ring."

Short articles, queries and comments on all phases of farm work and practice are wanted, and we hope our brother Patrons will furnish their share.

The writer is a full-fledged "granger," and believes in the order more and more as the days go by. We feel bound to help the cause to the best of our ability at all times. We attended our first State Grange meeting a few weeks ago, and hope to meet our worthy brothers and sisters annually for many years to come, in gradually increasing numbers.

#### CARE OF TOOLS.

A. L. N., of Lapeer Co., wishes to know how we manage to keep our binder and all tools under cover, without a large tool house, and a large open shed to drive under before detaching the team at night.

We have two barns of average size, one shed and an old house. All the buildings are old, but in very good repair. We cannot yet build the large basement barn we have in our mind's eye, so shall do our very best with what we have.

Part of our tools, when in actual use, are kept in the shed, and on the barn floor. Those not in use are stored away in the old house and on the scaffolds of the barn. The binder stands on trucks, in the old house, until harvest. As soon as the wheat is cut it is run onto the barn floor. There it stands until oats are ready to be harvested. As soon as its work for the season is over, we take off the aprons, flag, reel, bundle carrier and tongue. We do not even leave this "machine of steel" out in the field over Sunday, if the weather is unfavorable.

We have one good-sized shed to drive into or back tools under to stand temporarily. It takes no more time to haul wheeled implements to the barn or shed than it does to unhitch and leave them in the field.

The binder has been used six or seven years, and is nearly as good as new. The trucks are very convenient. The writer has put the truck attachment underneath in ten minutes, alone, without unhitching the three-horse team.

The trucks are used in storing the machine away in the tool house, thus taking all strain off from the drive or master wheel. The binder takes up less space in storage with the attachments taken off. We haul to the field on trucks, as it is much easier to get through gates and fence gaps.

We have a ten-ounce canvas cover which is put on every night when in the field. All bolts are kept tight, and everything inspected every day when in use. We use the best grade of machine oil for lubricating. It is the best, for all purposes, of any of the many kinds we have tried, and the cheapest in the end. Many of the so-called "machine oils" are not worth the casks which contain them. They are light and thin, and it takes enormous quantities to keep farm machinery in good running order.

Rather than have our binder out in the sun and rain, after oats are harvested, we would take it apart, and store wherever there was a dry place.

#### A CHEAP SHED.

Many farmers who have no other places to store their machines, back them up against the sides or ends of their barns, and build cheap sheds over them. The cost of such sheds is far less than the interest on the money expended in the binder. A shed twelve by sixteen would furnish plenty of room and would hold several other tools besides.

Where timber is plentiful the frame need not cost much. Set posts in each corner and cover with a good quality of stock boards. The roof should be quite steep and the upper end fit closely to the barn. Boards one by twelve inches and creased on each

edge make the cheapest roof. They should be thoroughly dry when laid, and fitted closely. Battens will not be needed, if a good job is done. The side and one end can be covered with the same kind of boards. The other end should have double doors to draw binder in and out.

All binders should stand on truck wheels when stored away. This relieves the continuous strain on the drive wheel. With good care a binder should last ten or twelve years, according to the amount of work done.

J. H. BROWN.

CLIMAX, Mich., Dec. 29, 1896.

For the Michigan Farmer.

#### SWEET CORN FOR COWS—GRINDING FEED.

In reply to friend L. J. D., in regard to feeding sweet corn to cows, I will say I planted one-third acre of Stowell's Evergreen sweet corn, three feet ten inches apart each way, with a hand hoe.

I let it stand until matured and then placed my wagon in the field, took a knife and cut the ears, husks and all, from the stalks, and with my basket filled my wagon (50 bushels capacity), and stored in my cow barn and fed to my five cows.

I fed them eight to ten ears, husks and all, breaking the corn two or three times, according to size of ears. It was as good feed as I would ask for and I have had no sick cows.

I am now feeding corn meal, bran and oats, one-third of each, and I think my cows did as well on the corn as they do on the ground feed.

I am running a feed mill and grind my own feed and that of all my neighbors. The mill is run with six horses on a mounted threshing power. I have ground in this way for my stock for three years.

I grind from 15 to 30 bushels per hour almost every day. Dec. 7th I ground 33 bushels of corn and oats in one hour, very fine.

I have a four-horse cylinder sheller and shell 120 bushels of ear corn per hour. Have a bolting sieve and make graham flour and corn meal for home use.

CLINTON Co.

G. A. R.

For the Michigan Farmer.

#### WRITING FOR THE MICHIGAN FARMER—COMMERCIAL FERTILIZERS.

In the last (Dec. 19) issue of the FARMER, Editor Brown says: "The winter months have come and many of our brother farmers have plenty of time to write us some of their experience in farming." \* \* \* Nothing makes a farm paper more attractive and valuable to us farmers than the short communications, whether queries, replies, or both, pertaining to our everyday work on the farm. So, we say, write for the FARMER and write often."

It seems to me that our good editor is like Oliver Twist, always asking for more, no matter how much we write. Now I move that we farmers put a stop to this "more" business and compel the editor to cry "hold, hold, enough!"

We can easily do this. All that is necessary will be for each reader of the FARMER to send in a bit of experience. If we cannot afford a stamp, envelope and paper, we can "boil down" our communications and send them in on a postal card. Brother farmers, there's fun ahead for us—"a hint to the wise is sufficient."

#### AS TO COMMERCIAL FERTILIZERS.

I desire to say a few words and ask a question or two in regard to commercial fertilizers. I live in a section of country where these goods are used quite extensively, though not so much so as formerly.

Our farmers have expended a great deal of money in this way. I wish I could approximate the amount. Let me see. Township six miles square, thirty-six square miles, 640 acres to the square mile, that means 23,040 acres, or say 200 farms, averaging 115 acres each. Think I may safely say that three-fourths of these farms have been fertilized, more or less, in the last ten years; 150 farms, say a half ton annually to each farm—75 tons—at say \$30 per ton—\$1,500 annually or \$15,000 for the ten years.

Has it paid us? Well we have thought so until recently, or we should not have submitted to the heavy tax. But the sentiment of farmers seems to be changing. They are not so sanguine as formerly. They believe, some of them at least, that these fertilizers are losing their effect. On sandy or gravelly soil no fertilizer has been found that did any perceptible good. But on clayey land any good brand will produce a marked result for one or more seasons.

Fifteen or eighteen years ago my father bought a fertilizer grain drill, the first introduced in the township. Since then we have used more or less fertilizer nearly every year. Have applied it to corn, but it never seemed to increase the yield, its chief virtue being in giving the young plant a quick start on clayey soil, and helping it to get out of the way of weeds and cutworms, and in giving the farmer a chance to begin cultivation earlier.

The contrast between fertilized and unfertilized rows of corn in the early part of the season, is sometimes very great. About ten years ago, in planting and fertilizing a field, we left several rows unfertilized to enable us to note the contrast, and determine as to the merits or demerits of fertilizers.

During the early part of the season the fertilized corn was fully twice as big as the unfertilized, and possessed a rich dark green color, the unfertilized having a yellowish, sickly cast. But in midsummer the difference began to disappear, and at cutting up time, all difference had disappeared entirely.

As a rule I think farmers make a great mistake in not leaving test rows or strips, when using commercial fertilizers. In this matter they are certainly guilty of "going it blind." This should always be done, every season and in every field. Don't think that a brand that happens to give good results one season is sure to do so the next, or that a brand that proved satisfactory when applied to a certain field, is sure to result favorably if administered to an adjoining field.

Now the question I wish to ask is this: Are commercial fertilizers more of a stimulant than a plant food? It is my belief that they are, and that their chief virtue consists in unlocking and rendering available, as plant food, elements of fertility stored away in the ground. This view of the matter, is, I believe, at variance with that entertained by our learned men; but nevertheless, I cannot see it in any other light.

The way I reason is as follows: We apply 100 pounds of fertilizer to an acre of thin, clay land. On an adjoining acre of same quality of soil, we apply no fertilizer. In hauling in the shocks during harvest, we drive onto the scales and weigh that which grew on each acre. We find that the fertilized acre has produced, in grain and straw, 1,000 pounds more than the unfertilized one. The application of the 100 pounds of fertilizer has caused an increase in weight of crop of 1,000 lbs. (No one familiar with the action or result of fertilizers on clay land will doubt that such an increase



is frequently obtained from such an application).

Now, the query in my mind is this: If my theory, that commercial fertilizers are more stimulating than feeding, is false, where does the 900 pounds of extra weight come from? We apply 100 pounds and get 1,000 pounds, or 900 pounds more than we apply. From whence comes this 900 pounds, the extra amount over and above that which we apply?

If the 100 pounds applied was a plant food, and nothing but a plant food, and the growing crop pumped every atom of it out of the soil the first season (which it could not do), how could it possibly increase the weight of the crop more than 100 pounds?

It has been said that "nothing can come out of nothing." If this adage is true, as it certainly is, how can 1,000 pounds come out of 100 pounds? Our learned men say that commercial fertilizers are plant foods, not stimulants. If they are correct, it would seem that a great deal can come out of nothing. If they are correct, it would seem that, in this case, 900 pounds can come out of nothing.

Let me illustrate this commercial-fertilizer-plant-food-stimulant question in another way: Suppose a man is sick (like some soils) and that he takes a bottle of medicine weighing one pound, and as a result he gains ten pounds in weight. Would that medicine be a food for the body, and a food only, or would it be an agency through which the sick man was enabled to partake of more food, or through which his assimilating powers were improved?

Knox Co., Ohio. FRANK LESLIE.  
[As to friend Leslie's "hint" to the "wise," (meaning our progressive brother farmers), we think we are prepared to stand the shock which he wishes sent us through a heavy accumulation of mail. We have plenty of "cold storage" room, and all matter sent will be in safe keeping until it can be utilized. So fire away, brother farmers! Take friend Leslie's "hint" to yourselves in the same manner that he has responded by sending us the above interesting article on fertilizers.]

We hope the above article will call out a thorough discussion of the value of commercial fertilizers to the progressive farmers of Michigan and surrounding territory. Of course they have no value to the farmer who is not progressive enough to apply them intelligently. But we also doubt their being of material value to many intelligent, painstaking, progressive farmers, under any conditions whatever, so far as actual and practical fertilization of the soil is concerned.

This is making a strong "statement," but we do it, in connection with friend Leslie's statement and queries, in order to provoke a thorough discussion of the question.

On heavy soil, well filled with vegetable matter, or humus, in connection with green manuring, or barnyard manure, and for growing certain crops, commercial fertilizers have been of material value to the "specialist" farmer. Under all other conditions the result has, in the long run, proved more or less disappointing.

On some farms where commercial fertilizers have been used for a long series of years, in the regular rotation of crops, it has been found necessary to still continue their application, in order to keep up a fair average in crop production. This is now being done on some farms where the owners claim no benefit, other than that given by the average whiskey toper—"to keep up their strength."

We have used but a small amount of commercial fertilizers on our own farm, and never saw any benefit from their application. However, we have never tested such fertilizers enough to prove either their value or worthlessness on our soil for regular crop growing. We shall make another trial next season.—Ed.]

For the Michigan Farmer.

#### VALUE OF CORN GROWING.

The farmers in Huron County are largely engaged in the corn industry on account of the value of its products for fodder. The stalks are consumed by cattle, horses and sheep and may be used more economically and to better advantage by those farmers who chop them by means of a feed cutter and mix the cut stalks with bran or meal of some sort before feeding the same to the animals. Corn on the ear is usually fed to cattle, horses, hogs and poultry, but it is generally ground into meal for sheep and fattening cattle and should also be ground for milch cows, as this tends to increase the flow of milk, and the extra quantity of butter may more than pay for the difference of waste, besides the cost of grinding.

Many of our leading farmers are beginning to realize the benefit of cutting and grinding feed for their stock by experimenting on this plan and comparing the results of such feeding with those derived from former methods. The corn crop was a success here this year, owing to more rain than in 1895 and in several fields the ears are much larger and finer. The principal varieties of corn raised in this county are White and Yellow Dent and Smut Nose. Besides the above leading varieties there are several common ones grown extensively. Ensilage is extensively raised for stock and yields well. There are some farmers who cut green corn for fodder and place it in silos to be cured. This is a very good method of preparing feed for winter as it has proven successful in many instances.

The cost of a silo is considerable, yet it can generally be made to pay in the end, with careful management, as cornstalks saved in this way are greatly relished by

stock. In some of the older counties of this State, as for example Gratiot, corn is raised on a large scale and there the stalks are cut and the ears ground as above mentioned before being fed to animals. Animals were fattened there on clover hay and corn meal, and the beef was excellent. Corn is also found to be of considerable value in fattening hogs as it produces first-class pork.

Huron Co.

W. E. M.

For the Michigan Farmer.

#### EXPERIENCE WITH SWEET CORN FOR COWS AND HOGS.

I am a reader of the FARMER, and saw one man's views on sweet corn as a feed, so thought I would give my experience. Last spring I planted five acres of Evergreen sweet corn in rows three and one-half feet apart each way. When it got to be one or one and one-half feet high I commenced to thin the hills and gave it to my hogs. Kept this up all summer until they refused to eat the stalk; would eat the corn and leaves, leaving the main stalk. Then began breaking ears off, leaving husks on. After the first heavy frost I cut it up in shocks of 16 hills each; left it until cold weather, husked and sorted it, giving the poor corn to my fattening hogs, the good in a cool dry place. I think it will keep all right. I feed it to my cows with the corn in the fodder; tried giving it to my team, but it did not agree with them; perhaps I fed too much on the start. My cows get all they can eat three times a day and are in good condition to go into the winter. I think sweet corn is good feed for farmers to raise. I shall plant about the same amount next year but will put in smaller shocks. We had corn from the middle of July to the first of October. As to cattle and hogs eating the frozen corn, I took some frozen corn with some yellow dent and threw it to my hogs; they ate the frozen corn before touching the other, and the cows ate it up clean. But as to fattening hogs I think they grow and fatten a third quicker, and the pork is much nicer.

IONIA Co., Mich.

C. H. DILLENBECK.

#### LIGHTNING RODS AND PROTECTION OF FARM BUILDINGS FROM LIGHTNING.

BY DR. R. C. KEDZIE.

Twenty-one years ago I read an article on lightning rods before the Farmers' Institutes, in Allegan, Decatur, Adrian and Coldwater. This paper and the discussion that sprung up on the subject were published in the Report of the State Board of Agriculture for 1875. At that time the lightning rod peddler, with his spanking team and gaily painted wagon, carrying rods, ladders and materials for putting up the rods, was seen in all parts of our State, and large sums of money were gathered from the rural communities. Houses and barns of moderate size received elaborate and costly outfits of lightning rods, regardless of expense. After a few years this waste of money ceased and the lightning rod peddler faded from view.

But folks forget many things in twenty-one years, and the peddler seems to be emerging from obscurity, and to be again getting in his work in some parts of the State. The lightning also has been unusually destructive this year, and the loss in buildings and other property has been large during the past season. For these reasons, I have thought it well to again call attention to the method of protecting life and property by means of lightning rods, and how to do this at small expense.

I do not propose to discuss the ideal lightning rod, but the practical rod, which will give reasonable protection at reasonable cost. Neither shall I attempt a discussion of the essential nature of electricity; but simply offer some suggestions as to the means by which we may guard ourselves from the destructive power of the lightning. Our object is not, like Ajax, to defy the thunder bolt, but to seek some safe path by which it may be conveyed to the earth, without danger to life or destruction of property. We do not seek to arrest the lightning, but to give it freest passage into the ground. For this purpose we need a conductor of such capacity that it will safely conduct into the ground any flash of lightning that may fall from the clouds, which would otherwise pass through our buildings or persons. The better the conductor and the less the resistance encountered, the more certainly the lightning will take this path and not go through the building, which is a poorer conductor and offers more resistance.

#### CONDUCTORS.

The metals as a class offer less resistance to the passage of electricity than most other solids, and are therefore called conductors. Thus a bar of metal will transmit a heavy flash of lightning, while a bar of wood of the same size would be torn to pieces or even set on fire. With respect to lightning, there are two classes of substances. 1. *Conductors*, which offer an easy passage for the lightning, (including the metals as a class). 2. *Nonconductors*, which strongly resist the passage of the lightning, such as glass, wood, brick, etc. But this classification into conductors and nonconductors is not absolute—only a question of degree and not of kind. There is no perfect conductor—offering no resistance to the passage of lightning; there is no absolute nonconductor, preventing its passage entirely. Thus, air is a good nonconductor of electricity, yet a flash of lightning may leap through air to a distance of a mile or more.

While metals are called conductors as a class, they yet differ in power. Silver is the

best conductor, then copper, gold and iron, in their order. But silver, copper and gold are too costly to use for lightning rods, and we resort to the cheaper metal, iron. We secure equally as good results with this poorer conductor by increasing the diameter of the rod. For example, suppose that copper has four times the conducting power of iron; if we take a bar of copper one-half inch in diameter and an iron rod of the same length one inch in diameter, the iron bar will be as good conductor as the copper bar, because its cross section is four times as large. By using the iron rod of larger size we get as good conduction as by the use of the smaller copper rod.

*The Iron Rod.*—There are several advantages secured by the use of the iron rod. Iron is more rigid than copper and will keep its place better, not being so easily swayed and bent by the wind when the rod projects many feet above the top of the building. The iron rod, notwithstanding its larger size, is much cheaper than the copper rod, because iron is a cheaper metal than copper. The rod of rolled iron is also cheaper because it is manufactured for general purposes, such materials being less costly than those manufactured for a specific purpose and used for no other, such as the "star rods" so generally sold for lightning rods. These bars of rolled iron are to be found in every hardware store in the State, and are sold at a very low price. One hundred feet of rolled iron five-eighths of an inch in diameter, weighing 100 pounds, are sold by C. M. Norton, in Lansing, for \$2.20, and he says the price should not be more than \$2.30 anywhere in the State. The first cost of this material for a lightning rod is therefore very small, yet its conducting power is ample. A lightning rod of this material, properly put up, will safely carry off any bolt that falls from our sky.

BULLETIN No. 3. MICH. AGRIC. COLLEGE.  
(Concluded next week.)

#### A TALK ON OATS.

A Canadian farmer, in a letter to *Farm and Fireside*, gives some very good suggestions regarding the oat crop. Here is a part of what he said:

I have seen it stated that there are upwards of five hundred varieties of oats, and I have no doubt that each one of these varieties will suit some particular locality or variety of soil or climate better than any other. So the problem for the farmer to solve is, which variety is most suitable for his soil, in order to grow them to the best advantage. Oats may be divided into two classes, according to the shape of the berry—long and short. A cool, moist climate is most suitable for the growth of oats. Nowhere do they grow to such perfection as in Ireland and Scotland. The summer of 1895 in this district being cool and moist, was the most suitable for oats of any that I have seen in Canada, and the crop was immense, the straw being six to seven feet high, and the grain plump and heavy. The climate around the lakes and on the coasts I would consider to be the more suitable for oats than any part of this continent. For the drier and hotter parts, the short oats will be the most suitable. For the more cool and moist parts, some of the long varieties will undoubtedly yield the best crops.

I do not know that there is much difference in the composition of the different varieties of oats, except that some of them are much thicker in the husk than others, and the short varieties have in general a little more starch in their composition than the long, therefore, I consider the oats that yield the highest percentage of meal to be the best. I have no experience in oatmeal milling in this country, but in the west of Scotland I have, as near as I can calculate, handled in milling, 1,600,000 bushels of oats, producing about 20,000 long tons of oatmeal, and I have invariably found the long varieties of oats to produce the highest percentage of meal. The best lot of oats I ever handled were of the Finlay variety, and produced 65 per cent meal. The worst were a variety of short oats, known as Poland oats, which only yielded 43½ per cent of meal. These last, however, were an exceptionally bad lot, the husk being so heavy that after passing through the shellings, it could not be separated from the kernel by the ordinary means. In the west of Scotland the Finlay variety of long oats is the favorite. The average milling quality of these are 63 per cent meal. In the east, which is drier, the Potato oat, which is the shortest and heaviest oat I have seen, is the favorite. Its average percentage of meal is about 60. I do not know how Canadian oats will compare with these percentages. As far as I can judge from what I have seen, I think they are heavier in the husk than either Irish or Scotch oats, but they are undoubtedly drier and should not shrink so much on the kiln.

Oats again may be divided into four classes, according to their color—white, red, tawny, and black. Each of these classes possess distinct characteristics, and are suitable for different classes of soil. A good clay loam is best for white oats. Red oats do better on light sandy soil than any other, while black are the most suitable for soft mucky soils. Tawny oats are, so far as I know, only grown in Ireland and some parts of England, and are sown in the fall or early winter. They ripen early, and are said to be very prolific and have but a light husk. A chemist once asked me for a sample of meal from tawny oats for analysis, and told me afterwards that the meal contained 1½ per cent more fat than any meal that he had analyzed.

The cultivation of oats is perhaps the simplest of any of the cereals, and beyond doubt they are the hardest of all the cereals. They do not require deep ploughing, as they are not as deep-rooted as wheat. A furrow five inches deep, by eight inches broad, is about the best for oats. Oats re-

quire nitrogen for their growth, thus you always have a good crop of oats after clover, beans or peas, and best of all, when the land seeded down with grass and clover, has been pastured for two or three years. A top-dressing of lime is good for oats. I knew a farmer who top-dressed his land with lime, and his oats averaged three pounds per bushel more in weight than before. Nitrate of soda as a top-dressing raises a great bulk of oat straw, but the oats are always lighter in weight per bushel than without it. Peruvian guano, bones and superphosphates make the oats earlier and heavier per bushel. But take it all round, there is no better manure for oats than farm-yard manure. Oats for feed, either for horses, stock, or the genus human, are unrivalled.

I saw it gravely stated in an article in an agricultural journal the other week that the reason that horses were so spirited and playful when fed on oats was that the husks of the oats tickled the horse's stomach. It has been proved beyond doubt that two pounds of oatmeal pressed as much nutriment as three pounds of the best wheat flour. The people in the rural districts of Scotland are much taller and stronger than the denizens of the big towns and cities, who live more on wheat bread, and consume less oatmeal. The people of Ayrshire and Galloway, the most distinctly rural counties, have the highest average height of adults, being five feet, ten and one-half inches.

There is nothing simpler than to make good porridge when you have good meal. Yet I must confess I have found few who could do it, so I will give directions, which, if followed, cannot fail to turn out a palatable and nutritious dish for breakfast. First, have your water boiling briskly; put in the required quantity of salt, then take a handful of oatmeal (medium cut is best), and let it run slowly through your fingers into the boiling water, stirring all the time; continue adding meal till the porridge stops rising, then boil for fifteen minutes briskly; dish, and serve hot with sweet milk.

#### 215 BUSHEL OF CORN PER ACRE.

Last spring prizes amounting to \$500 were offered for the best crop of the new "Iowa Silver Mine Corn" grown on one acre. A very large number of the reports range between 100 and 200 bushels, but the prize winner grew 14,190 lbs. of ear corn, or 203 bu. 50 lbs. An average bushel of 70 lbs. of this corn when shelled weighed 59½ lbs. Figuring in this way, it would make the total crop of shelled corn to the acre 215 bu. 20 lbs., or the largest crop of corn ever grown in any of the corn producing States, and with one exception, the largest crop ever grown in the world. It was an Iowa farmer who won the prize, Claus Jochimsen, of Scott county, Iowa.

The ground where this corn was grown was a slough in the center of a corn field, which had been thoroughly drained and was plowed for the first time two years ago. Last year wheat was planted on the ground, but the soil was so rich that the crop was a failure. This spring, to prepare for the prize crop, 15 loads of barnyard manure were hauled and carefully spread over the patch of ground, which was 476 feet long by 93½ feet wide, thus making 43,506 square feet, or 54 feet less than an acre. The ground was plowed deeply on May 10th, thoroughly harrowed, and marked with a corn planter at the time the balance of the field was planted, but the dropper was shut off when the machine passed over this strip. The corn planter opened drills 3½ feet apart, and on May 12th, seed was dropped by hand using one peck to plant the acre, and it was covered with the feet, the ground afterwards being harrowed. The corn was cultivated three times, hoed and weeded twice, thinning the corn so that the stalks stood separate not less than 8 inches and not over 12 inches apart in any place.

The corn was surrounded by a yellow variety, so that it is not fit for seed purposes.

The field was level, high ground, black loam, with a clay subsoil. The field had special attention, as will be observed, throughout the season. Before the corn was gathered, the farmer removed two rows of the other corn on all sides around this strip so as to thoroughly separate it. Although the other corn was a different color, still he did not want any chance of an ear of corn from the other part of the field to be mixed with this. On November 9th and 10th, after the corn was thoroughly matured and dry it was gathered by Mr. Jochimsen and two of his neighbors. As fast as it was gathered it was hauled immediately to the nearest public scales and there carefully weighed, and the weights of each load recorded. The Iowa Seed Co., of Des Moines, Iowa, were the introducers of this variety of corn, and to verify the report signed by Mr. Jochimsen and two of his neighbors, the president of this company personally inspected the field and the corn grown on it, measuring the ground with a tape-line and also with a regular land measure. He examined and estimated the corn in the crib. As there was no other white corn grown on the place, there was no chance for a mixture. He also talked with the public weigh-master, with the postmaster, and a number of the neighbors, and came away thoroughly convinced that the statement was correct in every particular.

The only case ever known of a larger crop than this was of the White Gourd Seed corn, a large southern variety, too late to be grown in any of the states of the corn belt. This most wonderful yield can be more fully appreciated when it is known that the corn crop average of the United States is only 23 bushels per acre. This corn crop was grown without using any of



the commercial fertilizers, while the cost of fertilizers used on the Gourd Seed corn mentioned above was \$236.92. The crop was a wonderful sight as it stood on the ground. The season was very favorable. If it had happened to have been a wet season the crop would have been ruined.

The next largest crop ever reported was grown in New York state consisting of 213 bushels, green weight, or 191 bushels crib cured, of Clark's Early Mastodon corn, and fertilizers to the amount of \$17.50 were used in growing it.

## LIVE STOCK.

### HOGS FOR THE EXPORT TRADE.

The steady extension of the demand for cut meats, such as hams and bacon, for the export trade, with a relative falling off in the demand for barreled pork, is naturally affecting the values of different classes of hogs, and there is now quite a difference in price between the heavy packers' hog and the bacon hog, with the difference in favor of the latter. The change in the demand has not been fully met by either breeders or feeders, and the result is that American bacon abroad does not sell even with that from other countries where the requirements of the consuming markets are either better understood or a more general attempt is made to meet them. President Dece, of the Chicago Packing and Provision Co., recently gave in the *Drovers' Journal* some suggestions as to what is required in this direction, and also as to the feed best adapted to produce the style of hog demanded. Here is what he said:

"The fact that the Danish and Canadian packers get a higher price for their product is not due to enterprise. The Danish and Canadian hog makes a meat more to the fancy of the Englishman than our western corn-fed animal. That is simply the result of the feeding. We take the same hog, but the corn changes its character, and makes it fatter than the Englishman fancy. The Canadian's hog suits better because he does not feed corn. We have even a hog in Texas which makes a better English meat than the hog raised in the corn belt, and the reason of it is that the Texas hog does not get so much corn, mainly for the reason that there is not so much corn to give him."

In this connection the following extracts from the report of Mr. Morton, Secretary of Agriculture, are timely and pertinent:

"Great Britain continues the largest purchaser and importer of swine flesh and hog products in the world. In 1893 British consumers took from foreign countries 3,000,000 hundredweight, over 3,500,000 hundredweight in 1894, more than 4,000,000 hundredweight in 1895, and nearly 3,500,000 hundredweight during the first nine months of 1896. This year will, therefore, show a large increase in consumption. It is noticeable that while there was an increase of 800,000 hundredweight in 1895 over 1893 the value fell from \$41,250,000 to \$38,500,000.

"Shipments from the United States of these products are pretty steady and average 2,500,000 hundredweight a year. American packers are not participating in the profits of the growth in consumption of swine flesh and hog products in Great Britain as much as they ought to, because they do not cure meats especially suited to the English demand. But their Danish and Canadian competitors are increasing their shipments into the United Kingdom every year. This is because the packers of Denmark and Canada are carefully catering to the taste of the English consumer. Eighty per cent of the entire Danish product finds market in England. The cost of swine at the packing house in Denmark is given at 6 cents a pound live weight, with a dockage of 20 per cent on refuse, together with 28 pounds of bone. The freight on the product to London is only \$7.30 per ton, and the price realized is about \$11 per 100 pounds.

"Irish packers are more damaged by Danish competition than are those of the United States, and the great abattoirs of Ireland are advocating improvement in breed of swine for that country, and also in the methods of curing the meat for the market.

"Our bacon sells for less money in the English market than that of any other country. The reason for this is found in its overfatness and saltiness. When bacon prices are depressed, the lower grades are proportionately more depressed than the higher. Therefore American bacon ranges from about two cents per pound wholesale below Continental and Irish bacon and about three cents below English bacon. American bacon in the English market will bring a better price when it is prepared with a view of meeting the tastes and demands of English people. But to-day American packers merely dump their overflow product upon the English market for what it will bring, and leave the higher prices to English, Canadian, and Danish packers.

"American hams are held in higher estimation than bacon and hold their own in competition with all other countries, so that in quantities shipped and in prices, hams and pickled pork from the United States are equal to the same products from other countries."

The fact that American hams sell on a par with the best of other countries, is proof positive that it is not the flavor of the pork, but its condition, that tells against American bacon. It is evidently too fat, or the great bulk of it is, as compared with Danish or Irish. There is too much corn fed. What is wanted is a more active hog, and less corn in its diet. Activity makes muscle and keeps down fat, or rather uses it

to build up muscular tissue. The young hogs should have a good range, and a large part of their growth come from the pasture. Clover and bluegrass, with middlings and corn meal, and all the milk possible, is the sort of feed to grow the bacon hog. Small potatoes cooked, the refuse fruit from the orchard, oats, barley, peas and cooked beans, are all excellent feed for the growing hog. A couple or three weeks before they are to be marketed, give them some old corn to finish them up. Market them while under 200 lbs. live weight. Get the weights from the increased number fed, not from the heavy weights of the animals. The weight will not cost any more to produce, and it is worth from 15 to 20 cents per hundred more in the Chicago market.

### INQUIRIES ABOUT RED HOGS.

To the Editor of the Michigan Farmer.

Being a reader of your valuable paper and seeing that you answer questions, I write you to ask one: Is there such a breed of hog as the Red Irish Grazer? If so, please give a short sketch of them, and could a common farmer tell the difference between them and the Jersey Reds? Please name the different distinct breeds of red hogs. If there is such a breed as the Red Irish Grazer I would like to know where I could get one. Respectfully yours,

HILLSDALE CO. R. O. HUMPHREY.

There is, or rather there was, a breed of hogs known as the Irish Grazer. They are mentioned as having been imported to some extent into the eastern States and Ohio a number of years ago. We cannot say what their color was. Whatever it was, they have long since ceased to exist as a distinct breed in this country, having been interbred with others. They were reputed to have had some influence in the formation of the Poland-China, which at first was a spotted hog, black and white mostly, but frequently with the white spots showing a red or sandy color. We do not find any reference to the breed of late years in Irish agricultural journals, from which we are led to believe that they have been intermixed with other breeds, notably those of England, which seem to form the great proportion of the hogs exhibited at the agricultural fairs in Ireland.

As to distinct breeds of red hogs, we have only knowledge of two—the English Tamworth and the American Duroc Jersey. The Tamworth is being imported to some extent into Canada to cross with other English breeds and the Poland-China, with the idea in view of getting a better bacon hog. It is a coarse hog, from the American standpoint—large boned, long bodied and slab-sided—a deep narrow hog, carrying a great proportion of lean meat. The Duroc Jersey is so well known as not to require any description. We think you will find it will suit you better than any other red hog.

### QUEEN VICTORIA AS A STOCK RAISER.

According to the *London Meat Trades Journal*, the annual sale of the Queen's Christmas stock was held December 9th, at the Prince Consort's Flemish farm in Windsor Great Park. Buyers were present from London, Liverpool, Leeds, Birmingham, Hull, Winchester, Portsmouth, Isle of Man, Chesterfield and other points. The weather was cold and showery. Previous to the selling, the visitors were entertained by Mr. Tait, her majesty's land steward, in one of the homestead buildings, which had been prepared for the luncheon. The catalogue comprised 35 Devon, Shorthorn and Hereford bullocks, 420 Hampshire Down and South Down sheep and lambs, and 110 bacon hogs and porkers. Excellent prices were made for most of the animals, all of which had been fed upon the royal farm. Devon bullocks fetched from \$27 to \$43 each; Devon heifers, \$22 to \$25; Hereford heifers, \$19; Shorthorn steers, \$38 to \$40, and a Shorthorn heifer \$35. Hampshire Down wether sheep, \$3 10s to \$6 10s; Hampshire Down lambs, 65s to 77s 6d; South Down wether sheep 57s to 64s; South Down lambs, 40s to 62s; Berkshire bacon pigs, \$9 to \$13; Berkshire fat hogs, \$3 10s to \$13; Berkshire porkers, 40s to 75s, and white Windsor bred porkers, 42s 6d to \$7 each. The total amount realized was \$3,130. Prior to the sale Mr. Buckland announced that he was instructed to say that neither at the present sale nor any other future sale or show of her majesty's stock would any "order" be given to purchasers of stock to supply meat to the royal household.

Taking the figures paid for the animals, calculating the pound sterling at \$5 and the shilling at 24 cents, it will be seen that the prices paid were very high. The highest priced steer would cost \$215, the highest priced heifer \$175, the highest priced sheep \$30.50, the highest priced lamb \$19.20, the highest priced hog \$65. Of course, these prices would not have been paid for equally as good stock sent in by a farmer. There was a good deal paid for glory and the advertisement which would come from the sale of stock fed on the Queen's farm. The Queen, however, is not compelled, as heretofore, to eat a portion of her own stock, and will thus be able to supply the royal tables with the cheaper meats raised by some of her plebeian subjects, or, perhaps, with the superior meats of one of the big Chicago dressed meat companies.

ATTENTION is called to the advertisement of C. H. Dana, West Lebanon, N. H., offering free samples of his Stock Labels. Mr. Dana's Labels have met with very universal use by the leading breeders and recording associations.

### BEANS FOR PIGS.

To the Editor of the Michigan Farmer.

Having some 200 bushels of beans that got badly injured by the rains, would like to ask through the *FARMER* if any of its readers have had any experience in feeding beans to brood sows and pigs, and how they prepared them. By answering the above you would confer a favor on many of your numerous readers as well as.

ISABELLA COUNTY, Mich. E. H. ESTES.

The sows and pigs will take to the beans all right, once they get used to them. Beans are a heavy feed, and should be used with discretion. They should be cooked, and it would be well at first to mix them with a little bran and feed while warm. Cook until soft. One feed per day is all that should be given until the pigs get accustomed to them. As the pigs get older they can be given two feeds per day, but should always have some other ration with them. English feeders grind beans into meal, and mix the meal with pea or barley meal, and feed roots with the ration. Bean meal uncooked, is also frequently used in England as a part of the ration of work horses, and found to be excellent. It is mixed with bran and a little oil meal. Some of our readers are using beans as a feed this winter, generally for fattening hogs, and perhaps some of them will answer the queries of Mr. Estes.

### GENESEE COUNTY OXFORD DOWN SHEEP BREEDERS' ASSOCIATION.

Pursuant to a call issued by Dr. B. F. Miller, there met at his office in Flint, Michigan, on January 1, the following named gentlemen: Hon. W. A. Atwood, H. C. Spencer, Hon. D. D. Aitken, Edgar S. Lee, B. F. Miller, F. P. Smith, Hon. R. J. Whaley, E. O. Wood, W. A. Patterson, W. F. Stewart.

Preliminary organization was effected by electing Hon. W. A. Atwood chairman, and Edwin O. Wood secretary.

Mr. Wood read a letter from Mr. W. A. Shafer, secretary of the American Oxford Down Sheep Breeders' Association, of Middleton, Ohio, and one from Mr. Robert Gibbons, of the *MICHIGAN FARMER*, in which each expressed his regret at being unable to be present, and gave extended views with reference to the benefits to be derived from such an association.

It was moved by Mr. Wood that an association be organized known as the Genesee County Oxford Down Sheep Breeders' Association. Carried.

Moved that membership be limited to residents of Genesee county who are owners of ten or more pure bred registered Oxford Down sheep. Carried.

Moved that a person or firm eligible to membership in this association must be a member of the American Oxford Down Association. Carried.

Moved by Mr. Lee that the association be officered by a president, a secretary, a treasurer, a vice-president, and a board of directors consisting of seven members, three of which board should be the president, secretary and treasurer. Carried.

The following officers were then elected: President, W. A. Atwood; vice-president, Hon. R. J. Whaley; secretary, B. F. Miller; treasurer, H. C. Spencer; board of directors, Edwin O. Wood, D. D. Aitken, W. F. Stewart, Alexander McFarland.

On motion the president appointed Messrs. Lee and Miller a committee to draft by-laws and submit same at the next meeting of the association. Carried.

Moved by Mr. Spencer that Mr. Miller call a meeting for February 2, at 7 o'clock p. m., at his office in the city of Flint, for the purpose of forming a state association of Oxford Down Sheep breeders, and that the notice of such meeting be published in the *MICHIGAN FARMER*, the Detroit daily papers, the various state papers, and that a postal card notice be sent to all owners of Oxford Down sheep in the State whose names could be ascertained from Mr. Shafer, secretary of the national association. Carried.

Moved that Mr. Wood be elected delegate to represent the association at the national association to be held at Columbus, Ohio, January 12, 1897. Carried.

Moved that the thanks of the association be expressed through the secretary to Mr. W. A. Shafer, secretary of the National Association, and to Mr. Gibbons, of the *MICHIGAN FARMER*, for the very instructive letters received from them. Carried.

Adjourned.

### STOCK NOTES.

A. G. COBB, of Saline, recently sold to a local butcher of that place two Shorthorn steers, bred and raised by himself, that were only 21 months old, and one of which weighed 1,170 lbs., the other being a few pounds lighter. That is the sort of steers to raise to bring the best price and get your returns quick.

L. F. CONRAD, the man who breeds good Poland-China hogs, in a private note says: "Change 'boars for sale' to 'boars all sold' in my ad. Can't keep boars always if noticed in the *FARMER*." There is nothing better for the business of the breeder than a little ad. in the *FARMER*. It talks for them all the time, and to many thousands of those who are needing good stock.

W. R., Lake Odessa, writes: "I have a number of last spring calves that are not castrated. Had I better have it done now or next spring?" This matter should have been attended to while the calves were young, as they would have done better, and been more shapely as beef animals. Would have them attended to at once, and see that they are not exposed to storms or severe cold until fully recovered from the operation.

ABOUT 10,000 of the cattle that were here Monday ought to have been on feed for at least two months. In the feed lots they would have made money for the owners. On the market they simply paralyzed the trade and demoralized prices.—*Buffalo Mercantile Review*. About three-quarters of the cattle sold in this market would require a year's good feeding to put them in good condition, and a good many of them it would be useless to waste grain and hay upon. They ought to have been slaughtered as calves.

In December, Mr. Chas. R. Cook, of Oakland Co., author of our first prize essay on "Early Lambs for Profit," delivered to Chas. Harger his crop of grade Shropshire lambs, 13 in number, after selecting out 12 ewe lambs. The 13 weighed 1,330 lbs., and brought \$1.40 per cwt., or \$4.50 per head. These lambs were dropped all the way from the first till the last of March. They received no grain until November 9th, at which time they were put into the feeding pen and fed clover hay, shelled corn and potatoes. The dams of these lambs are grades, and gave a clip of a fraction over seven pounds of wool per head (eleven months' growth), which sold for 13 cents per pound. Now let the new Congress put on a good tariff and this flock will become profitable from both a wool and mutton standpoint.

THERE seems to be a great deal of misunderstanding throughout the country in regard to government inspection of hogs and especially the selling of stock subject to inspection, many shippers having the idea that this is optional with the commission man. This is not so, but on the contrary, when hogs are condemned by the inspectors at the scales it becomes a case of no sale or of post mortem examination at the packing house by the inspectors stationed there who condemn such as the law requires and pass all others. This applies to all sick hogs or hogs showing symptoms of sickness. Sows heavy with pig are condemned at the scales, thrown out and tagged and can not be disposed of until after farrowing, so that the countryman is the loser by sending such to market. In this connection it is well to remember that while light hogs that are bright and all right, weighing from 150 lbs. up, are selling at around top figures, and lighter weights, shoats, etc., especially if dumpy and not fat, are not good sellers.—*Omaha Journal*.

The Bureau of Animal Industry of the Department of Agriculture, recommends the following mixture as a preventive and cure for hog cholera and swine plague, the figures indicating pounds in each instance: Wood charcoal, 1; sulphur, 1; sodium chloride, 2; sodium bicarbonate, 2; sodium hyposulphite, 2; sodium sulphite, 1; antimony sulphide (black antimony), 1. Pulverize and thoroughly mix. Give a large tablespoonful in the feed once a day for each 200 lbs. weight of hogs to be treated. The feed should be changed from corn alone, at least one feed a day made by mixing bran and middlings, or middlings and corn meal, or ground oats and corn, or crushed wheat with hot water, and then stirring into this the proper quantity of the medicine. If the cholera is in your neighborhood, the same remedy can be used as a preventive, looking carefully after the sanitary condition of your hogs, and seeing that they have a dry, comfortable place to sleep in.

SECRETARY Jno. G. Springer, of the American Southdown Breeders' Association, in a letter to Southdown breeders, writes: Entries are now being made in Volume VII of the Record; in order that registries may appear in this volume, pedigrees should be sent without delay. It is hoped that a sufficient number of entries will be made so that the volume may be published at an early day. Be certain to have your breeding stock recorded so that you may secure in pedigreeing your lambs of 1897, and before penalty fees attach. Although the sheep industry is not in the condition we would like to see it, yet Southdown breeders may well congratulate themselves for the fact that during the year 1896, interest in this breed of sheep has greatly increased over previous years. Reports indicate that most breeders have disposed of all that they cared to spare, and that many Southdowns have been sent into sections of the country where they were hitherto unknown. From the fact that where they are liked, and increased demand for them has been made, the prospect for sales during the coming year seems remarkably good. To secure full advantage of the opportunity that is presented for the advancement of Southdown interests, you are urged to earnest efforts in presenting and pushing their claims for usefulness and profit.

## Chills

Indicate undue exposure and too little vitality to resist the cold. Avoid danger by keeping the blood pure and system healthy with

## Hood's Sarsaparilla

The best—in fact The One True Blood Purifier.

### SURE CURE FOR LAMB CHOLERA.

Farmers, save your lambs next spring; it will pay you. Get receipt now and be ready. I have not lost any for four years. You will never be sorry. \$1.

### Sure Cure for Foot-rot Sheep.

Cure your sheep and be ready for spring. \$1. You never regret it. Both recipes \$1.75. Money order. Good reference. ELMER BUNKER, Ashley, Delaware Co., Ohio.



## The Horse.

### THE DRIVING HORSE.

Some of you will prefer to breed the horse for light harness, because there is a "get up and get there" about him which is the very complement of your own nature. You can make money out of him. Sometimes I think a man can make more money breeding and raising light harness horses than any other kind. They are certainly easier to take care of than the heavy fellows. They are not so often foaled dead. There are a number of subdivisions of this type. Nearly all are capable of doing ordinary farm work. The Morgan horses of Illinois are liked the best by the farmers there for general use. They are solid, blocky built fellows with a good deal of nerve force and snap. And then, too, they possess, in a marked degree, the ability of taking care of themselves, which cannot be said of the heavy breeds. But it is difficult to get the Morgan tall enough for the present demand. The popularity of the Hackney horse, however, is going to help the Morgan breeding business, for, after all, your Englishman's horse ranges from 14 to 15½ hands and there are a lot of people in the city who like the Hackney rather small, 14 or 14½ hands. This will have its effect on the Morgan, for there is very little difference between the conformation of the two, and if anything, the Morgan is a trifle the smoother.

However, the regular demand is for a horse of size and substance, ranging from 15½ to 16 hands, and the solid colors are desired mostly. How can we best produce this kind of animal? If you have a well-bred trotting mare, you may patronize the French Coach stallion, and the foal will be all that can be desired. The French Coach horse has a number of points of excellence. He has length, depth and motion. He can elevate his head without an overdraw check. And that reminds me of the difference between the coach teams in Cleveland and Chicago. In the former city no coach team is ever reined up. The horses go with their heads free in the finest mounted harness and in the nicest and most expensive coaches. But in Chicago the rein is used—every kind of rein, the gag, the overdraw check, and others. I like the Cleveland fashion the better. In fact, it is the very best thing in the world to drive a coach team free as to their heads. But horses, to carry up well, then, must be trained. The rein must be used in their training and the whip also, and they must be trained and drilled until they catch the idea that to carry the head up is as important as to parade with the front paws.

But if you have an ordinary farm mare and wish to breed a modern light harness horse with snap and go and size and substance, go to the big, well-bred American trotter. He breeds the best type of roadster or driver from the cold-blooded dam. The Wilkes horses are the smoothest over the hips, the back and the loins. There are many Wilkes, furthermore, which breed extraordinary large, notably the sons of Red Wilkes and Onward. Why, I have a crop of weanlings this year by a son of Red Wilkes, out of a line of thoroughbred producing dams, all out of dams 15.3 to 16 hands, which are larger than most yearlings. These colts have length, breadth, depth, good bone and plenty of substance. I never felt better over any crop of colts which I have bred. I want you to raise this kind and be as happy as I am in seeing them grow, develop and perform. These colts make the type of horses which the foreigners buy for exportation. They make horses big enough for almost any use.

But there is also a place for the smaller driving horse, provided you can breed pairs. There are still a great many gentlemen in the cities of our own country who like to drive glib stepping, smallish, smooth pairs. I bought three pairs the other day that would make any man's eye water—blacks, as black as midnight. I bought them of one of the men who has followed my advice in breeding horses for profit. Said I to him, not long ago: "Breed Wilkes. You are intelligent. Try for a little of the unearned increment. You have farms and you have been raising sheep, but the tariff has been taken off of wool and you must drop the sheep. You can't raise them profitably until wool is protected again, which, thank God, it will be, by and by. Breed all those nice mares to that good Wilkes stallion of your neighbor's and it will pay." When I paid him for the six four-year-olds \$1,200 in cash, he told me that it had paid. They were just nicely broken, but he had not handled any of them more than a month in all their lives.

"Why," said he, "those neat made colts don't eat any more than a big sheep. They are so smooth about the loins that they can't get poor if you do not feed them at all. They are a hearty race. I like them, and I like you for putting me on the right track. I will raise 'the kind' from this on," and I believe he will.

ROGER CRANE.

### HORSES' TEETH.

Here is a little information regarding horses' teeth, from an eastern veterinarian, which should be borne in mind by those who have any to care for:

Horses do not chew their food by a direct up-and-down motion. The under jaw is narrower than the upper, and when the lower jaw is raised to meet the upper it is worked sideways so as to grind the grain

or hay between the surfaces of the opposing rows of teeth. Now, the movement sideways must pull the insides of the cheek against the outside edge of the upper teeth. To anyone who has never seen nor felt these teeth the intensely keen, sharp condition they get in would, indeed, be a great surprise. Owing to the irregular outline of the border of the teeth the points that form can best be described as comparing them to briars. The inside edge of the lower jaw is likewise sharp, but not near so long or keen as the outside or upper edge. Sometimes, but not as a rule, they are very sharp.

Now, it has been the writer's experience that a great percentage of horses that do not do well are simply prevented by sharp teeth. The horse finds more comfort in grinding his food as little as possible and swallowing it as quickly as he can. For every time he attempts to grind each mouthful the sharp points stick into his cheeks and pain him, and he learns by intuition to avoid that which causes him pain, and in consequence he bolts his food before masticating it. Almost all grain has an indigestible shell surrounding the nutritious portion, and unless this outside shell is broken, all the whole grain swallowed by a horse passes through him without doing him any good.

As a positive proof of this the writer has in several hundred cases smoothed these sharp points, and immediately the horses gained rapidly in flesh, without any other agent being used to help them.

As a horse has six molars on each side of the jaw it is important, when they are being smoothed, to have every tooth looked after, for the main trouble may be with the last tooth back, and too often only the first three or four teeth are filed, and the back teeth neglected. A simple test that can be used by even the inexperienced as to whether the outside edge has been properly smoothed, without having to put the hands inside the mouth, is to rub the fingers quite firmly against the edge of the upper teeth, and if the horse opens the mouth, or twists the lower jaw, have this row of teeth looked at again. Time and time again I have almost lifted the horse's head by the force applied against the outside edge of the upper row, and the horse evinced no pain whatever. The first requisite for a horse to do well is for him to grind his food properly, and if he bolts a large percentage just so much is lost. Again, food that is not masticated as it should be causes indigestion, and indigestion produces colic, etc.

This article is only confined to the influence sharp teeth have upon horses' eating and digestion.

It is no pipe dream when the writer states that drivers, by a sudden yank upon the reins, cause horses such intense pain that they break into wild runs, and the more they are pulled the more excitable they become, till at last they become frantic and uncontrollable. All of which can be avoided by placing horses' teeth in a proper condition and having them kept so.

### HORSE GOSSIP.

A MARK owned by a farmer named John Robinson, near Warrensburg, Md., recently dropped five colts, but all died. Two years ago the same mare gave birth to three, and they are all alive. Eight colts in two years is a record.

The most successful breeders of both thoroughbreds and trotting horses are unanimous in declaring that racing two-year-olds is a great mistake, and results in positive injury to the animal in the great majority of cases.

To locate lameness first carefully observe the way the animal stands. If the foot is placed in front of the natural position, the trouble is probably below the fetlock, particularly if the foot rests upon the toe. If the knee is kept bent, the trouble is likely in that joint. Next, have the animal slowly trot from you and then toward you. As he trots from you, if the injury is behind he will throw his weight more heavily on the sound limb. As he trots toward you, if the injury is in front he will nod his head when the sound limb bears his weight, and toss his head up when the weight shifts to the injured member.

A French writer advises, with a view to economy, that oats should be soaked a few hours in water. He states that experiments have proved that the ration can be lessened about a third. Horses whose teeth are old, very imperfectly masticate their oats, and others swallow theirs quickly, thus losing the goodness. Soaking the oats for three hours, he says, will remedy this inconvenience, as the grain swells and softens and the horses masticate and digest it better. This writer may be right in some cases where the teeth of the animal are imperfect, but it is always advisable for any animal, and especially a horse, whose stomach is so small, to masticate its food. In no other way can it be thoroughly mixed with the saliva, which is a positive necessity for perfect digestion. Soaked oats will not require so much mastication as when dry, nor will they induce the flow of saliva to the same extent, consequently they go into the stomach half masticated, with but little saliva, and we have colics and similar diseases of the digestive organs. The best way to test this question is to experiment with yourself. Take a dry cracker, chew it slowly and thoroughly, and see how quickly the flow of saliva takes away its dryness and sweetens its taste. It is then in perfect condition for digestion, and therefore for nourishing the system. Now soak a cracker in water and chew it. What is the difference? It is tasteless; chewing it does not cause the free flow of saliva noted with the dry cracker, and it goes into your stomach in bad shape for digestion. If dyspeptics, either human beings or animals, are compelled to eat their food dry, especially when it is of a starchy nature, only drinking after through eating, they will soon get over their trouble.

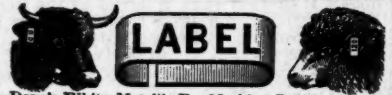
les. For horses disposed to stultulent colic everything should be fed dry to compel them to masticate their food thoroughly.

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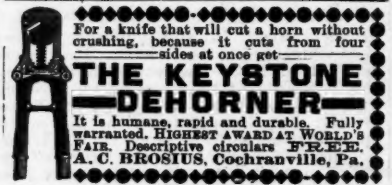
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## The Dairy.

For the Michigan Farmer.

### THE COW ON THE FARM.

One of the chief resources for obtaining money in small sums to meet the necessary expenses of the household, is to have a few good cows. These cows should be good cows for butter and milk, for it doesn't pay to keep a poor cow, let her look ever so nice. It costs very little more to keep a good cow than it does to keep a poor one.

Cows should be kept in a dry, warm stable, so warm that water won't freeze in cold weather. When I say kept in the stable, I don't mean for them to be kept in during the night and then turned out all through the day to shiver around a fence corner or straw stack, where the one "boss" cow will occupy the best place to be found, and drive the others all away, but I mean for them to be kept in during the daytime if the weather is cold, and if necessary, carry water to them. I never knew till I tried this plan, what a big difference it made in the amount of milk received. It takes very little cold to tell on a cow's milk. Even if your stable is cold you can notice the shrinkage of milk. This is why the stable should be very warm, but well ventilated, so the cow does not know how cold it is outside. By having the stable so warm that nothing will freeze in it, an even temperature will be maintained and the flow of milk will be more nearly even. Then again, it is a satisfaction to go into this warm stable and notice how comfortable the cows appear, lying in their stalls unconscious of the howling cold weather outside.

I often hear farmers say that "it doesn't pay to keep cows when butter is so cheap." I used to say so too, but everything that a farmer has to sell is cheap now, and I can't see that butter at a shilling is any cheaper than a good many other things that the farmer has to sell. Then again, you must remember that everything a farmer has to buy is cheaper than it used to be.

I have only one cow now where I used to keep five or six. Even though butter is cheap I find that the income is very much cut off, and when it comes to pay for groceries and other things purchased at the store, it makes a large hole in the sum derived from the other proceeds of the farm.

I was led to believe that it did not pay to keep cows, and by putting the efforts required in keeping the cows into some general crop for sale, that more would be gained and at the same time lessen the drudge work. While the drudge work is lessened, it is done at the expense of drawing from the other sources, and I often find myself short.

While I do not believe it policy for the farmer with 40 or 80 acres of good farm land that is capable of being all farmed, to raise calves up to two or three years old for feeding purposes, I do believe it the proper thing to have from three to six cows. These cows can be kept and the expense hardly noticed if a partly soiling system were adopted. And if you need anything in the shape of stock to feed in the winter to use up your surplus fodder, it would be best to buy a few good feeders. I am now writing of the farmer not having over 80 acres of land, and not of larger farmers with lots of pasture.

You must remember that butter is not the only article for sale from a small dairy, but lots of milk is furnished for feeding young pigs. You see pigs come right in line here. Then there are the calves to veal. These do not pay very well when the amount of milk they consume is taken into consideration, but it is something, and every little helps these times. I used to figure that a calf when six weeks old had consumed seven or eight dollars' worth of milk, if it could be sold at ordinary prices, so I thought that it was not a very paying business to sell veal calves for from four to five dollars, but we must not forget that the milk if not fed would, in nearly all cases, be thrown away, so we must conclude that there is this much saved if fed.

I spoke above of my having only one cow. I did not tell you that we raised 50 young pigs. Now, one cow and 50 pigs do not balance very well, neither do fifty cows and one pig. But six good cows will put the kinks in the tails of 50 young pigs in pretty good shape if the milk is fed in connection with other slops from the house, and some ground feed put in, which can all be raised on the farm. I intend to work gradually into a small dairy by getting the best cows for the purpose that I handily can.

For some years past I have raised sweet corn for the cow, and I find it one of the very best things to feed that can be given to a cow. I feed nothing but sweet corn from the middle of August 'till spring, and the cow keeps up a good flow of milk and never "gets off her feed." I have tried four or five different cows with this kind of feed, and it has worked the same in all cases. I give all they can eat three times a day, stalks with all the corn on. They never refuse eating it, and if clover hay is substituted for a few days the difference will soon be noticed by a decreased flow of milk and the cow will act as if something were wrong about the bill of fare.

I plant Stowell's Evergreen, and when first frost comes cut it and tie it into bundles of the right size for a feed and shock it up and tie it well and let it stand in the shock; for if drawn and stacked or stored in very large piles it will heat and spoil. After it is "cured out" in the shock it can be drawn close to where you wish to feed, and shocked in long shocks and there will be no danger of spoiling.

I do not think that I speak in too strong

terms of the value of sweet corn. Such a large quantity can be grown on a small piece of ground. It can be planted in rows 3 1/2 feet apart and two feet apart in the row, and as soon as it gets large enough to cut and feed, every other hill can be cut and fed, leaving the rows 3 1/2 feet apart, which, when mature, will make an enormous amount of feed. This corn can be fed through all the dry season of short pasture and the cows will always keep up the flow of good milk until you want to dry them up.

GRATIOT CO.

I. N. COWDREY.

For the Michigan Farmer.

### DO COWS PAY AND DO CREAMERIES PAY?

Considerable interest has been created in this section of the country as to whether creameries pay or not. In 1895 I had some experience in the Middleville Cold Spring Creamery, and will give you a short report.

I had four good cows and one that had lost one-quarter of bag and gave about one-third as much milk as each of the other cows averaged. This one was unprofitable and was sold for beef during the year. Following are the returns:

INCOME.	
Milk.....	94,083 lbs.
Average test.....	3.98
Butter.....	1,160 lbs.
Average price.....	20.17c
Total proceeds.....	\$242.91
Sold veal calves, 4, for.....	24.50
Returned milk at 10c per 100 lbs.....	21.67
Total net proceeds.....	\$289.08
EXPENSES.	
Making at 4c per lb.....	\$46.76
Butter for home use, 106 lbs.....	22.02
Total expense.....	\$ 68.78
Total proceeds.....	\$220.30

Allowing the cow I sold to make the butter we used, and deducting the making and butter used from the total net proceeds, I had \$220.30 for the remaining four cows, or \$55.06 average per head. I drew my own milk.

We consider this as far superior to raising grain at the present prices. And better still than making at home, if you count a woman's work anything. The skim milk was not sold, but I estimated it at 10c. per 100 lbs., and consider that a very low estimate, for it is an excellent feed for pigs and calves.

By the way, I have access to one of the best creameries in the State, for the Middleville creamery ranks second to none. The third creamery has been started in the county, and bids fair to make a success.

BARRY CO.

PRACTICAL FARMER.

[There is no doubt that a well conducted creamery is a paying investment, as there is ample evidence to prove. The creamery conducted by the Ypsilanti Dairy Association is a co-operative one, and has, since its first year, always paid its patrons well for their milk. Mr. Fletcher, the superintendent, in a recent note to the FARMER, says:

"In the last four months we have handled 5,011,464 lbs. of milk, with an average test of 3.93, and an average price paid the dairymen, of 67 1/4-10c. per hundred pounds milk; this is about 14c. per hundred less than they received the year before." The patrons also receive back the skimmed milk, which, at present prices for pork, would be worth from 14 to 15 cents per hundred pounds. We doubt if there is anything else on the farm at present paying better than good cows.—ED. FARMER.]

For the Michigan Farmer.

### BUTTER POINTS.—No. 7.

Do not use hard water to wash butter. It is more or less impregnated with lime which induces a deterioration of the butter fats. Do not use water from a very shallow well, as there is a liability of surface water which bears with it impurities and germs of decay.

The test given for salt should be employed occasionally, as some of the brands now on the market contain gypsum or sulphate of lime. Unless the salt is pulverized very fine, and perfectly distributed throughout the butter, the effect of this adulteration is sometimes apparent.

Years ago when there was not the care taken in the manufacture of salt that there is now, minute white spots were often found in butter. Modern investigation and experiment pronounce these spots to be the result of the action of sulphate of lime on the butter fats. To prepare butter for packing, pure soft water, and pure salt are prime requisites.

While awaiting the final working, set the bowl in a place excluded from the light, or closely cover the top. Light has a bleaching effect on the color of butter. Formerly when butter was made into rolls, and left long exposed to the light, the surfaces showed a lighter color than the inside.

There is little call for roll butter now. The demand is for that which has been excluded as much as possible from the action of light and air, and stored where there is little opportunity for the absorption of surrounding odors. To take advantage of this susceptibility to surroundings it has been suggested that the atmosphere of the dairy room be made redolent with the perfume of flowers. As a people we have not yet become so esthetic as to demand violet, heliotrope, or tuberose butter, but we can and must keep it intact from stable or kitchen odors.

To emphasize this, a recent experience is related. Last Saturday a friend asked me to purchase for her a jar of butter at one of our town stores. I asked the proprietor if

he had any nice butter. "Yes," he said. "Some has just been brought in."

He brought forward a half-gallon jar. It appeared to be nicely packed and was of an even yellow color. I was in haste, and with only the eye test, bought the butter. On tasting it later it was found to be so impregnated with smoke as to be utterly unfit to eat, and to-day I must return it. When will women cease to place such villainous compounds upon the market, and get the same price as is paid for nice butter? Surely, there is a screw loose somewhere.

As has previously been stated, butter should pass directly from the producer to the consumer. It is at its best within a week after it leaves the churn. It may be kept sweet and good for months, but the delicate aroma, the nutty flavor is not long retained.

Direct downward pressure does not injure the grain or texture of butter, but drawing the ladle across the surface does. Pressing gives a fine grain and dry texture; a repeated drawing of the ladle across it breaks the grain and makes butter waxy.

The following method of keeping packed butter is given as the result of a series of experiments, and is believed to be the best practicable on the farm.

Get the butter in good condition as soon as possible after churning, and pack solidly in half-gallon jars. When the jars are purchased, have number as well as weight marked upon each so that a record of the number of pounds each package contains can readily be kept.

Pack the jars even full, tie over each a thick cloth and put them in large jars, such as are sold for pickling meat. Keep them covered at least two inches in depth with brine. The first cost of these jars is considerable, but they are easily kept sweet and with good care will last almost a life time. To cleanse them use a hot lime water bath or one of strong soda water.

Make the brine as strong as possible, using all the salt the water will hold in solution. To each gallon add a heaping teaspoonful of pulverized saltpetre, and a teaspoonful of granulated sugar. Scald, skim thoroughly, and when perfectly cold, strain through a thick wet cloth into the crock. Several different formulas for brine have from time to time been tried, and the one given is now used with perfect satisfaction. Tie a thick cloth over the crock, and over this place a cover of wood to exclude the light.

Do not set the crock on the cellar bottom whether it be of earth or cement, but upon a raised platform with slats underneath the crock to give a free circulation of air. The outside of the jars should often be rubbed vigorously with a dry cloth to remove every vestige of mold, which is so likely to form in the damp atmosphere of a cellar. Be especially careful to keep the bottom of the jar clean and free from mold germs.

There is usually a time in August and September before the early fall rains start the pastures that there is a brisk local demand. Butter packed in the manner recommended meets with a ready sale and commands a better price than earlier in the season.

A few hints and suggestions close these papers on "Butter Points." Carrot juice

should not be used to color butter unless for immediate use. An element is thus introduced which is prejudicial to its keeping quality. The standard coloring compounds are especially prepared, cost little money, and are always available.

Prof. Robertson, of Guelph, Ontario, is authority for the statement that salt to the amount of a quarter of a pound a day should be added to the ration of a milch cow. He says that other conditions being equal, a cow fed this amount of salt daily will yield fourteen to seventeen per cent more and richer milk, than if deprived of salt; that in hot weather milk will keep sweet several hours longer if salt is a part of the daily ration.

An experienced dairyman says that good milk always foams—that the foam may be considered an index of the milk—that it indicates the power of the milk to hold the butter globules in suspension.

The idea of imparting to butter the odor of flowers is not as fanciful as may appear; its feasibility can be verified. Spread newly churned unsalted butter over the inside of two plates; cover over with freshly gathered rose leaves, sweet-scented violets or tuberose; in twenty-four hours the butter will become impregnated with the perfume of the flowers.

Making butter is now recognized as a fine art, which will be more and more perfected in the future. New principles will be discovered by the chemist, new methods evolved by the scientist. It now demands knowledge and skill unknown in former days. In the world's onward march, the luscious golden butter of the future will require as skillful a hand as the painting of a picture or the writing of a poem.

LAKE CO., OHIO.

SARAH E. WILCOX.

For the Michigan Farmer.

### IS SWEET CORN INJURIOUS TO COWS?

I raised some the same way as S. J. D. did. Mine did not get ripe, but was good boiling corn. I cut just before the frost, and I have been feeding it ever since.

I run it, corn and all, through the cutter. Am feeding to milch cows and fattening cattle and horses, and all are doing well.

I don't think any harm can come from it, but when this is fed out and gone I think cows will require more grain to replace the sweet corn. If corn was matured on the stalk I should husk it.

JACKSON CO.

E. L. MOORE.

If buyers would take a little trouble to properly care for the cheese they purchase, it would keep better, there would be little loss, and housekeepers would be encouraged to use more. Nearly all kinds of cheese while awaiting use in the household should be kept in a special vessel from which the air is excluded. A stone jar with a tight-fitting cover is a suitable receptacle. This should be placed in a storeroom or dry cellar, where the temperature is constant at 50 to 60 degrees F. The air must not be so free from moisture as to dry out and harden the cheese, nor so damp as to promote the growth of mould.

## The Salt that's All Salt ALWAYS WINS.

MERIDALE FARMS,  
DIAMOND CRYSTAL SALT CO.,  
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MEREDITH, Del. Co., N. Y.  
December 2, 1896.

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Very truly yours,  
(Signed) AYER & MCKINNEY.

Such a record manifestly speaks for itself, and Diamond Crystal Salt has many such records to its credit. It wins the confidence of those who try it, wins the praise of all who continue its use. Diamond Crystal Salt has been analyzed by the leading scientists, tested by the leading experts, competed at the leading conventions with all other salts, and stands to-day first and foremost in the opinion of all who know its merits. Let us send you a book of practical information about

## DIAMOND CRYSTAL SALT

DIAMOND CRYSTAL SALT CO., ST. CLAIR, MICH.



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Lady Asst. Steward—Mrs. S. G. Knott, Moler, W. Va.

### EXECUTIVE COMMITTEE.

Leonard Rhone, Centre Hall, Pa., Chairman.  
J. J. Woodman, Paw Paw, Michigan, Secretary.  
N. J. Bachelder, East Andover, N. H.  
J. H. Brigham, Ohio, Ex-Officio.

### THE EDITOR'S TABLE.

Greeting. Very briefly we shall make our bow to the many readers of the MICHIGAN FARMER. The Grange Visitor, for twenty-two years the official organ of the Michigan State Grange, has been discontinued, and its place is to be filled, and its work done, by this department of the MICHIGAN FARMER. We have been asked to inaugurate this new department, and we wish to take time to say just a word personally. We believe in the Grange and its principles. We believe that the farmers of our State need the Grange with its fraternity, its training, its co-operation, its concentration of effort, its high purposes and noble aims for the betterment of the farmer and his family. We believe, too, in the farmer, in his business, in his future, and are intensely interested in all of the many problems that confront him. Believing these things, we have heart in our work. And we shall ask that whatever mistakes we may make be charged to poor judgment and not to our motives.

The Aim of the Department. As its name implies, this department is to be devoted to the interests of the Grange of Michigan. We shall therefore endeavor to present those facts and ideas which shall make for the building up and increase of the Order in this State. We shall discuss those questions which concern the machinery of the Grange, Subordinate, Pomona, State and National. Questions that involve an increase in our membership, an enlargement of our work, the organization of new Granges, all these are fit topics for our best thought. But our conception of the Grange is that it does not exist for itself or for its own glory, but for the good it may do. We must have organization, machinery, and must expend thought and energy in perfecting this machinery. But in doing this class of work we must not forget our purposes. Therefore, we shall wish to lay especial stress in this department upon those questions and topics about which the Grange most concerns itself. As the Grange is broad in its sympathies, these topics will cover a wide field, including educational, legislative, economic, and social. The scope of the department ought to incite the interest of all farmers, whether members of the Order or not.

A Word to Patrons. Doubtless these words will meet the eyes of many Patrons who are already subscribers to the FARMER. To you we extend the fraternal hand and say that we are still with you. Our beloved Visitor has gone the way of all things. We bid it farewell with much of real sorrow. It was "our friend, faithful and just to us." But the Grange still lives, and we still have, in this department, a means of expressing our views, and of receiving encouragement and inspiration from each other. We want to ask you, Patrons,

for your heartiest co-operation in making this department a grand success. We want you to feel free to express your views on Grange topics, and especially to let us know of the experiments, trials, successes, and failures of Subordinate Granges. Let us hear from you freely. We shall do our best to make the department invaluable to every loyal Patron; but we can not do our best unless we have the active support of every loyal Patron. Write us your opinions and experiences along Grange lines, and then see that every Patron's family has the MICHIGAN FARMER regularly.

For the benefit of those not members of the Grange, as well as some who are members, we would say that in the nomenclature of the Grange there is no such word as "Granger." The official name of the Grange is "Patrons of Husbandry," and the name applied to an individual member of the Order, is that of "Patron." Our habit is to use this word in place of the less euphonious and less pleasant word "Granger." So know us henceforth as "Patrons."

Many, perhaps a majority, of the present readers of the FARMER are not members of the Grange. We beg a moment of the time of such ones. While this department is of, for, and by the Grange, we want you to understand fully that that fact does not make it unreadable to you. The Grange stands for the best things the farmer is today striving for. Hence our discussions, purposes, hopes, fears, plans, labors, are all of interest to you. You may find some things occasionally concerning more particularly the machinery of the Order that you do not care for. But our aim shall be to make this department as interesting and valuable to you as is any part of this paper. We want you to know about the Grange, what it is trying to do and how it is trying to do it. We want you to become interested in our work, and to become fully in sympathy, if not in active co-operation, with our endeavor to improve the condition of the farmers of our State.

One of our ambitions in connection with this department is to make a special feature of Grange news. We want frequent brief notes from every Grange in Michigan. Nothing we can do will make our department more readable to Patrons and farmers generally. Nothing will do more to help individual Granges than to see what others are doing. Therefore, we hope that each Grange will make it someone's duty to see that something is sent to the FARMER at least once a month. We want crisp items about what you are doing, and especially what your members think.

At this meeting several papers and discussions were intimately related to the subject of rural schools, especially that of nature study in district schools. Pres. Angell said that the most important problem in education to-day is that of the rural school. It must be made better. The country boy must have as good opportunities as the city boy has. Prof. Hinsdale said that the great centers of wealth, the cities, must pay not only for the education of their own children, but must contribute also to the education of the children of the farming communities, where less wealth exists. He also said that there is at work a committee of the National Educational Association upon the subject of the rural schools. This committee expect to make a comprehensive and practical report next July.

The following quotation from an eastern exchange shows what is being done in Massachusetts along the lines of the Redfern liquor commission bill which we have been championing for the past two years. We commend it to the careful reading of every lover of his country:

"The Massachusetts Bureau of Statistics of Labor, acting under the instructions of the legislature, has made an investigation of the relation of the liquor traffic to pauperism, crime and insanity. The method adopted was that of direct inquiry of the inmates of the State institutions and of all persons passing through the courts of the State for a year.

"The results of the investigation make a suggestive and important volume. As to the insane, so far as could be ascertained, seven out of every ten had intemperate parents; and one out of every four was believed to have been made insane by his own intemperate habits.

"Of all the paupers of the State institutions, three out of every four were addicted

to the use of liquor, and nearly one-half had intemperate parents.

"Of all the arrests for crime during the year, two-thirds were for drunkenness. Taking into account all kinds of crime, in about eight and one-half cases in every ten the intemperate habits of the offender led to a condition which induced the crime; and, excluding minors, ninety-six of every one hundred persons convicted of crime were addicted to the use of liquor.

"Massachusetts has a local-option law, under which the cities and towns vote annually upon the licensing of saloons. One branch of the bureau's investigation was directed to ascertaining the relative amount of drunkenness in places where the saloons were closed and in those where they were open. In the no-license cities and towns the arrests for drunkenness were only about one-fourth, and for offences other than drunkenness, less than half as many per thousand of the population as in license cities and towns. In five cities which were for a part of the year under license and a part of the year under no license, the licensed months showed nearly three times as many arrests for drunkenness, on the average, as the no-license months.

"These statistics, taken as a whole, seem not only to establish a close connection between the liquor traffic and crime, pauperism and insanity, but to show also a considerable curtailment of these evils when saloons are closed."

### FROM THE MASTER.

#### A Word from the Master of Michigan State Grange.

MICHIGAN STATE GRANGE,  
MASTER'S OFFICE,  
FRUIT RIDGE, Dec. 28th, 1896.

To, the Members of the Grange, and Farmers of Michigan.

GREETING: In accordance with a contract made between the Executive Committee of the State Grange and the publishers of the MICHIGAN FARMER, this new department of Grange reading is placed before you. We sincerely hope that all members of the Order will fully appreciate the advantages to be gained by thus having placed before them weekly, such items of Grange news, and discussion of seasonable and general questions as are of interest to all and in harmony with our line of work. By this more frequent exchange and presentation of thought the best interests of the Order should be served as never before. This combination makes it possible for every Patron's family to have both Grange and general agricultural reading before them at a minimum cost. To make this department the success we hope for, every Subordinate Grange should appoint, at once, some active member to report in a brief, yet comprehensive form, the important features of Grange meetings and discussions. This is not only a duty on the part of the Grange, but the work will be of benefit to the person who faithfully performs it. Each Grange should also urge the importance of having the MICHIGAN FARMER in every family. The members cannot keep in touch and sympathy with Grange work short of it.

Of the farmers in general we ask an impartial and careful reading of the Grange department, hoping that many may be led to see their duties as being along the line of organized and concentrated effort to improve and increase the opportunities and advantages of farm people. GEO. B. HORTON.

### A LOSS TO THE GRANGE.

American agriculture has lost one of its ablest defenders and supporters in the death of ex-Congressman Wm. H. Hatch, who died recently.

The deceased achieved a national reputation during his 16 years' service in Congress. He was a candidate for Speaker of the House against the late Charles F. Crisp, and was mentioned as a Presidential possibility in the recent campaign. He was author of the famous Anti-Option bill bearing his name and was a warm advocate of a measure providing for purer food.

The Grange especially has cause to deeply deplore the passing away of this unflinching, always honest statesman, who as Chairman of the House Committee of Agriculture, always gave prominence to their testimony regarding the condition and wants of the farmers of the country. May a kind Providence raise up others who will prove equally honest and energetic in the cause of agriculture.

### GRANGE NEWS.

Capitol Grange, No. 540, at its last meeting discussed the subject of "Impressions of the State Grange." Several members had attended nearly all the sessions of the State Grange, and the following were some of the ideas expressed: "The committee reports were of unusual strength." "The Grange has improved wonderfully the past few years, especially in the ideas of concentration." "The Grange now not only resolves, but acts." Capitol Grange has already secured two members as a result of the public session of the State Grange.

The first issue of the National Grange Quarterly Bulletin for 1897 was sent out from the office of the National Lecturer Dec. 31. All lecturers of Subordinate and Pomona Granges are entitled to a copy free. In mailing this issue the 1896 rosters were necessarily used. Newly installed lecturers should receive this issue of the Quarterly Bulletin from the past lecturer or secretary to whom it has been sent.

### EXECUTIVE COMMITTEE.

#### Report of Executive Committee Michigan State Grange, 1896.

Worthy Master and Members of the Michigan State Grange:

Your Committee realizes the position in which we are placed at this time. The financial condition of our country having become a partisan political issue, we cannot further discuss this topic in the Grange. We must be extremely careful in the discussion of topics on political economy, that our work and words do not savor of partisanship.

The Worthy Master's report covers the general work of the Order, while a standing committee is appointed to report upon almost every conceivable topic, which under present condition leaves but little for the Executive Committee to report upon without encroaching upon the province of some other committee. However, we are cognizant of the fact that there is a broad field of labor open to the Order. Just what lines of work should be pursued in the year to come, the Grange in its good judgment must decide upon from among the multitude of topics which will be submitted for your consideration at this session.

### INSURANCE.

In compliance with a resolution adopted by this Grange one year ago, asking for a strictly Grange mutual fire insurance, your committee proceeded to investigate the subject, not only the condition and workings of mutual companies in our own State, but in other States where companies of this kind have been in active operation for years. After having carefully considered the subject in all its bearings, we have partially formulated plans. We are led to believe that in some localities in this State an insurance company could be formed, which would be a good saving to the Patrons and be the means of largely increasing the membership of the Order. We would therefore recommend that the Executive Committee continue this investigation and formulate a definite plan of insurance, submitting the same to the Insurance Commissioner for his examination. When approved by him, proceed to put it in such a form that in any locality where the Grange can secure the requisite number of risks to entitle them to a charter, they may organize.

### TAXATION.

How can it be reduced? This is a subject in which we are all interested, and should be given our careful consideration at this session.

In our attempts to economize, let us not lose sight of the benefits to be derived from taxation, nor ask that salaries or appropriations be reduced below a fair compensation for services actually rendered, or the immediate needs of our public institutions to produce satisfactory results.

Taxation is largely of a local nature. Township, highway and school, all of which are under the immediate control of local taxpayers and are therefore regulated by them.

Retrenchment should begin in our local government. A disposition should be shown to see, not how much can be expended in the public service without being called extravagant, but how little can be used and still not impair the usefulness of any department.

Officials, high and low, are only our trusted agents, and we believe usually realize and appreciate the trust imposed in them. They should be required to serve the people honestly, as we believe they usually do, and should be paid a reasonable salary as is commensurate with the earnings of other branches of business and the ability of the people to pay. There will never be a lack of good material to fill all positions of public trust for a reasonable compensation. We most respectfully ask our incoming legislature before appointments are made to investigate and see if they need one hundred employees in the Senate and House of Representatives this winter at the Capitol. We believe the number could be materially reduced and still perform all the duties required.

We also believe there is a much larger force of department clerks employed than is necessary, and larger salaries paid than is commensurate with the services rendered.

We would therefore recommend a classification of the clerks in the different departments with a fixed salary by act of the incoming legislature.

We most earnestly ask that the greatest of care be taken by our legislators that all estimates for the support and maintenance of our public institutions be most carefully scrutinized before appropriations are made, and that the amount so appropriated shall in no case be larger than the actual needs of the institution demands, to make its work efficient and not impair its usefulness.

We further ask that no appropriation creating any new public institution be made by the incoming legislature, and no new buildings added to those that now exist unless absolutely necessary to provide for our unfortunates.

Believing that the one-sixth of one mill tax set aside for the support of the University of Michigan is sufficient for its every need, we are opposed to any further appropriation for said institution.

We would most respectfully but earnestly call upon our trusted servants, the officers in all positions of public trust, to practice economy in your own positions where you have the power to aid us, in township, county and State. And with the co-operation of the people, you may help in a measure to relieve the people of the burden of excessive taxation.

### LEGISLATION.

Once again we call the attention of the Grange to the proposed change from the district to the township unit school system,



which this State Grange has repeatedly expressed itself in no uncertain terms as opposed to.

Your committee appointed to have this matter in charge held a meeting in the city of Lansing in June, and among other things decided to have printed in the *Grange Visitor* a series of articles compiled by Bro. Holden, showing the relative cost, attendance, time taught and results obtained, as compared with the district system in this State and in counties in Indiana bordering on Michigan. Also the efficiency of the two systems; and in nearly every instance we find that our present district system is preferable in cost, attendance and efficiency to the unit system.

Great credit is due Bro. Holden for the active, thorough and careful investigation he has given the subject, and the unbiased manner in which he has caused his conclusions to be put before the public, that the people might see the justice in the position taken by the Grange on this subject. We would therefore recommend that the Legislative Committee have this matter in charge the coming year, with instructions to act further in opposition to this measure should occasion demand.

Recognizing the oft-repeated truth that a "public office is a public trust," and believing the nearer these public trusts can be kept to the people the better will the duties involved by those trusts be performed, therefore we, the Michigan State Grange, ask of the incoming legislature the enactment of a law authorizing the election of the members of the Michigan State Board of Agriculture by the direct vote of the people.

Your committee reaffirm our former recommendation that the Constitution of the United States be so amended that United States Senators shall be elected by direct vote of the people.

#### FREE RURAL MAIL DELIVERY.

Your committee beg leave to submit the following resolutions and recommend their adoption:

WHEREAS, It has been the well-settled policy of the government during all the years of its existence to extend postoffices and mail facilities to all parts of our vast country. It carries the mail to the daring pioneer who penetrates the forest as the advance guard of American civilization. The mail is carried on horseback, on bicycles, in carts, in wagons, in cars and on boats. In many cases it gives to newspapers free access to the mails. This is not done in the interest of the publishers, but for the purpose of educating the people, extending knowledge and strengthening love of country. It also employs an army of men to deliver all mail free to the citizens of our cities. This is done in many cases where the demand is not imperative.

All this and more has been done by our generous government without computing the cost of transporting each letter, book or paper to its destination. Now an effort on a small scale is being made to test the feasibility of free rural mail delivery. For almost the first time in the history of the postoffice and its work, we are confronted with the question, will it pay? By this is meant, will the increase in rural mail furnish revenue sufficient to pay the additional expense?

But why raise this question? Will it apply with any more force than when applied to free city delivery. It costs from \$600 to \$800 per thousand population for free city delivery, with no perceptible increase in receipts. It was never the policy of the government to require each branch of the service to be self-supporting. The free rural mail delivery will, in the hands of its friends, bring largely increased use of the mails, which will go far at least toward paying any additional cost.

Therefore, we, the members of the Executive Committee of the Michigan State Grange, respectfully submit the following resolution and recommend its adoption:

Resolved, That we hail with delight the information that a faithful and honest effort is to be made in this State to give the people free mail delivery to the homes of some of our own rural population.

We believe this can be made a source that will bring much comfort, happiness and profit to the dwellers in the rural homes; it will give new opportunity to extend education, increase knowledge and enlarge our love of home and country.

Resolved, That we tender our thanks to the postoffice department for the effort now being made; and we very respectfully ask our senators and representatives in Congress to give the experiment their sympathy and support.

At the last session of the State Grange it was recommended that the State Board of Agriculture establish a ladies' department, arrange for short courses, and change the college year at the Agricultural College. We are glad to know that said board has granted the requests, and by so doing has very much increased the advantages offered by that institution to our farmers and their sons and daughters. We trust that the people of the State will appreciate these efforts in their behalf, and hope that they will liberally patronize the institution.

#### CO-OPERATION.

Co-operation in buying and selling should now take a prominent place in the work of the Executive Committee. The Worthy Master has inaugurated a grand work in this direction, and now needs the active assistance of one or more members of the Executive Committee to further prosecute the work, to accomplish all that may be desired. We would recommend that the work be pushed vigorously the coming year.

#### THE LECTURE FIELD.

While the system of depending largely upon county deputies for the organization of new Granges, and the reorganization of dormant ones has been fairly successful in the past, we believe the time is now here when some more effective measures should

be adopted to aid in the organization of new Granges and the upbuilding of the Order in the State.

No great reform is accomplished and the good derived therefrom made enduring and permanent without labor—constant, persistent labor. No great battle is won without a general. No great good is accomplished without organization. No great organization will exist permanently without a suitable number of organizers any more than a church will be prosperous without a pastor. We must have new Granges organized, and new members secured to take the places of those whom we lose by death or removal. For this purpose we would recommend that a more vigorous Grange campaign be made this year than ever before.

#### CONCLUSION.

We come before the public as a body of representative farmers, asking no special favors (we do not believe in class-legislation), we ask only such legislation as shall place our business on an equal footing with other professions.

We meet for the purpose of conferring together upon topics of interest to us, and all the laboring classes of the land.

Our purpose is to educate ourselves in the needs of our chosen profession, in a moral, social and financial condition, so we may be able to ask intelligently and understandingly for such legislation as we need and deserve, having full confidence that when our needs are fully appreciated and understood by those who are in a position to aid us, our petitions will be heard and acted upon as the merits of the case demand.

The Grange has accomplished a grand work among the farmers in the past. Our future is before us. The good work that will bring results has only begun. With good conservative action, asking only justice, keeping entirely clear of all partisan politics in the future as we have in the past, having due respect for all other orders and associations having for their object the upbuilding and educating of the masses who labor, we look for a grand era of growth and prosperity of the Granges in Michigan the coming year.

With fire insurance within the Grange, co-operation in buying and selling conducted by the business arm of the Order, and pushed to its fullest extent, a capable and judicious committee to look after legislation, and a few live and thorough persons as State organizers, to furnish new recruits to a worthy cause, your committee predict a large accession to our membership, a progressive, prosperous and satisfactory result from the work of the Granges in Michigan for the year 1897.

All of which is most respectfully submitted,

WALLACE E. WRIGHT, F. W. REDFERN,  
H. D. PLATT, E. A. HOLDEN,  
CYRUS G. LUCE, R. R. DIVINE,  
PERRY MATO, G. B. HORTON,  
JENNIE BUELL, ex-officio.

#### OUR OBJECTS.

In some sections of the country and in some Granges in all parts of the country there seems to be a lack of comprehension of what the main objects of the Order really are. Whether this lack of knowledge is owing to a lack of efficiency on the part of those who organized the Granges or whether it is owing to the thoughtlessness of the members themselves needs no discussion. But wherein this difficulty does exist it is of the utmost importance that the mistaken ideas of the objects of the Grange should at once be corrected, for no Grange can long exist which is not in sympathy with the leading objects of the Order, or which does not fully understand what these objects are—*Our Grange Homes*.

#### A MORE GENERAL ORGANIZATION OF FARMERS NEEDED.

The following circular is being sent out under authority of the State Grange. As farmers, and interested in one common good, we ask of you a thoughtful reading of the following statements and solicitations:

This is a day and age of progress. Old methods give way to new.

For the promotion of all good works, individual effort is merged into organized, concentrated action.

Organization and union of effort is essential in sustaining such comparative standing between interests as their relative importance naturally give them.

The classes of people having similar and identical interests, if unorganized, are at the mercy of the organized.

The farming interest is the greatest and most important of all, and on account of the many complex conditions and demands that surround it, and the aggressive movements of other interests, aided by thorough organization, it needs most the benefits that can come only from a more united action.

All farmers seem willing to admit that some kind of organization of our class is desirable and essential if we expect to maintain our rightful position socially, intellectually and financially, and consequently influential on such legislation and affairs of the State and Nation as directly affect us.

Every farm community needs some permanent place where the farmer, his wife, his sons and daughters, can meet at least semi-monthly for social and mental improvement, and at the same time have the organization of such a nature that it can co-operate with other local communities in all the lines of work above mentioned.

A few farmers, even through organization, cannot answer the demands in a satisfactory manner for the support, improvement and protection to their class and its

general interests. The co-operation and assistance of all are needed. Each and every farmer has a duty to perform.

#### THE GRANGE WORTHY OF SUPPORT.

In this connection and for the purposes named, your attention is most respectfully, yet earnestly called to the merits of the Grange.

It has lived, where most other farmers' organizations have died.

It is fully equipped, from the Subordinate to the County, State and National Grange.

It has passed over the years of experiment and is now a live reality, doing a good work all along the line, yet not so effective as if you and all your farm neighbors were helpers.

The conservative course the Grange has taken gains the respect of all classes, so that it is recognized by those high in authority in the State and Nation as the real representative of all the farmers' wants and ideas.

#### WHY NOT HAVE A GRANGE IN YOUR VICINITY?

The members of the organization throughout the State who have stood up faithfully for years past doing a good work and gaining victories from which all farmers have received benefits, unite in an urgent solicitation to you and your neighbor farmers and your families to take such steps as will organize a Grange in your neighborhood. We feel that we can conscientiously urge such action.

We want your influence and your assistance in maintaining its work and making its power felt for greater good.

It will not interfere with your associations in other ways.

The work of the Grange is distinct from that of all other organizations.

It pertains to everyday life and welfare.

It invites and receives the whole family, and thus, in a union of all these as one great family, its work and influence can be no other than for the best.

We want every farmer to come in and help to make the Grange the most useful and helpful educational force in his respective township.

#### THE COST BUT LITTLE.

The expense of membership is so small that it is easily within the reach of all.

Its co-operative purchases from time to time, of such things as are used on and about the farm, will many times over compensate for all compulsory expenses.

Fees for joining are \$1.00 for men and boys, and \$1.10 for women and girls. All over 14 years of age are eligible for full membership. In the payment of the above fee each new member is credited with six months' advanced dues. Regular annual dues for all members are \$1.20. No organization so broad and useful is so cheap.

There should be at least twenty members to start with, and more would be desirable.

Will you and others of your family join in such a movement, and will you assist in securing enough people to complete an organization?

Granges succeed best out in the open country where other attractions do not absorb the attention of the members.

Preliminary meetings can be held at a schoolhouse or hall near the desired center.

#### NOTICES OF MEETINGS.

Allegan county Pomona Grange will meet with the Wayland Rural Grange the third Thursday in January, 1897. The program follows: Address of Welcome, Mrs. Marion Rosebrook, of Wayland. Response, Mr. Thomas Adams, of Shelbyville. Paper, "True Fraternity," by Henry Stockwell, of Otsego. Discussion, "Township Unit plan," N. W. Houser and others. All fourth degree members invited. N. J. ALLEN, Lect.

#### THE GRANGE IN OTHER STATES.

The Governor of Vermont has appointed the Master of the State Grange, C. J. Bell, and Alpha Messer, Lecturer of the National Grange, members of the Board of Agriculture of that State.

The Grange in Maine has a membership of 20,000, divided among 233 Granges, with a balance of \$3,700 in the Treasury. Eight new Granges have been organized during the past year.

The general condition of the Order in New Hampshire merits hearty commendation. Twenty Subordinate Granges have been organized during the year, and one has become dormant, making 218 active Granges with the membership of about 18,200, a net gain during the year of 1,400. One Pomona Grange has been organized during the year, making fifteen in all. Ten more Granges in the State will cover all the unorganized territory, which indicates the work of organization has been carried nearly to conclusion. When these have

been established, the farmers will have such an organization in New Hampshire as never before existed in an equal area in any part of the world.

The report of the committee on education of the Massachusetts State Grange called attention to the fact that children in the country schools should have as good educational facilities as those in the city, and that the only trouble in the way has been that of finance, consequently the State funds should be so used as to secure equal educational facilities on equal terms to all children in the State. The State must appropriate money enough to secure in every town teachers who shall be well equipped for their work. The State board of education should have ample authority to prevent incompetent persons from being appointed either to teach or to supervise the schools. Subordinate Granges should have a committee on education to visit the public schools within their jurisdiction, and report to the Grange. It would be well for every Grange to have one teachers' meeting during the year.

When writing to advertisers please mention that you saw their advertisement in the MICHIGAN FARMER.

#### Have You Asthma in Any Form?

Medical science at last reports a positive cure for Asthma in every form in the wonderful Kola Plant, a new botanical discovery found on the Congo River, West Africa. Its cures are really marvelous. Rev. J. L. Combs, of Martinsburg, W. Va., writes that it cured him of Asthma of fifty years' standing, and Hon. L. G. Clute, of Greeley, Iowa, testifies that for three years he had to sleep propped up in a chair, being unable to lie down night or day from Asthma. The Kola Plant cured him at once. To make the matter sure, these and hundreds of other cures are sworn to before a notary public. To prove to you beyond doubt its wonderful curative power, the Kola Importing Co., No. 1164 Broadway, New York, will send a large case of the Kola Compound free by mail to every reader of the MICHIGAN FARMER who suffers from any form of Asthma. All they ask in return is that when cured yourself you will tell your neighbors about it. Send your name and address on a postal card, and they will send you a large case by mail free. It costs nothing; you should surely try it.

**CORNADO** SPECIAL LOW PRICE FOR FIRST MACHINE SOLD IN UNOCCUPIED TERRITORY. DOES THE GANG & HAR WILL TWICE WORK SULKY PLOWS DO. AGENTS WANTED. SEND FOR CIRCULAR & TESTIMONIALS TO The Cutaway Harrow Co. HIGGANUM, CONN. - SOLE MANUFACTURERS -

#### The "SMALLEY" FAMILY OF "FEED SAVERS"



Our Silo Outfit at Work. Our "family" comprises for '96, Ensilage and Fodder Cutters, Corn Shredders, Feed Mills, Ear Corn Grinders, Root Cutters and Fodderers for operating. Our pamphlets should be read by every "up-to-date" stock-raiser and dairyman in U. S. No. 1. "The Model Round Silo and how to build it," latest reports from practical stock-feeders on the silo. No. 2 tells about "Corn-Hay," the new fodder product—its market and feeding value and how to make it. Free with catalogues if you name this paper. SMALLEY MFG. CO., Manitowoc, Wis.

#### FARM SCALES!

Guaranteed first-class in every respect. Buy direct and save middlemen's profit. Write for prices and description before purchasing elsewhere.

#### GRAND RAPIDS SCALE WORKS, Grand Rapids, Mich.

#### CANCERS CURED

by the absorption process. No knife. No caustic. No blood. No pain. Not a failure in fifteen years. Write DR. HESS, Grand Rapids, Mich., for particulars and references from those already cured. (Enclose ten cents.) (For cancer of the breast, if not broken out, treatment can be sent.)

#### SALESMEN WANTED

to solicit business men and farmers and establish agencies. Box 686, Canal Dover, Ohio.

## THE MICHIGAN FARMER and THE DETROIT Semi-weekly JOURNAL BOTH ONE YEAR For Only \$1.40!

The JOURNAL is issued on Tuesday and Friday of each week and is almost as good as a daily paper. It is a clean, reliable, bright and up-to-date newspaper in every way and a bargain at the price.

Present subscribers can have their subscriptions dated one year ahead and the JOURNAL started at once. Address all orders to

THE MICHIGAN FARMER, Detroit, Mich.



## Miscellaneous.

### WHEN MARY WAS A LASSIE.

The maple trees are tinged with red,  
The birch with golden yellow,  
And high above the orchard walls  
Hang apples rich and mellow;  
And that's the way through yonder lane  
That looks so still and grassy—  
The way I took one Sunday eve,  
When Mary was a lassie.

You'd hardly think that patient face,  
That looks so thin and faded,  
Was once the very sweetest one  
That bonnet ever shaded;  
But when I went through yonder lane,  
That looks so still and grassy,  
Those eyes were bright, those cheeks were fair,  
When Mary was a lassie.

But many a tender sorrow since,  
And many a patient care,  
Have made those furrows on the face  
That used to be so fair.  
Four times to yonder churchyard,  
Through the lane so still and grassy,  
We've borne and laid away our dead,—  
Since Mary was a lassie.

And so you see I've grown to love  
The wrinkles more than roses;  
Earth's winter flowers are sweeter far  
Than all spring's dewy posies;  
They'll carry us through yonder lane  
That looks so still and grassy—  
Adown the lane I used to go  
When Mary was a lassie.

—Anonymous.

## THE MATE OF THE HINDU.

BY CAPTAIN RALPH DAVIS.

(Continued.)

Neither of us turned in that night, and both of us were on deck at daylight. At sunrise a man was sent aloft with a glass, but he swept the sea in vain for sight of sail. The fellow could not hide the exultant look in his eyes as he came down and reported, and we felt that the hour of peril was close at hand. The demeanor of the men as they washed down the decks was defiant, and had the convict gangs come up as usual the outbreak would have occurred with the advent of the first. The captain ordered that they remain below until after the doctor's morning inspection. In view of the supposed pestilence this order did not seem to excite any great surprise.

When the passengers gathered for breakfast, all were surprised to observe that the cabin had been put in a state of defense. I may add that Dr. Haxton and those who sided with him were also cynical and inclined to joke about it. As the iron shutters were fitted inside, no one forward could know about them. We didn't want them to know, and I kept watch of the two single women as they went on deck after breakfast. I privately told Mr. and Mrs. Williams and Mary to remain below, and the other women somehow got warning and gave up their usual morning promenade, though the weather was beautifully fine.

As Dr. Haxton went forward to pay his morning call Roberts accompanied him. There were three children on the poopdeck, and I sent them below just as Haskell came aft, bringing his musket with him and working away at the lock as if it was in need of repairs. He gave me a look which signified that the time had come. Forward, there were the sailors of the morning watch, the guard-relief, the doctor and Roberts. Aft, we had the captain, second mate, Haskell, all other passengers and myself.

As Dr. Haxton descended to the cages Captain Clark ordered the two single women below, speaking so gruffly that they obeyed at once. Then he turned to Saunders and Smith, who were smoking and lounging, and said:

"Gentlemen, please step below for a minute, and don't stop to ask questions. Go now—at once!"

Something in his tones warned them of peril at hand, and they were out of sight before you could count 20. Ten seconds later a sound came aft which I can only compare to the confusion in a menagerie when the animals become excited. It was the convicts making their rush from cage No. 1 as the doctor opened the door to pass in. Most of the sailors rushed forward to the hatch, the guards called out and aimed their muskets, and then men in convict uniform began to appear on deck. We saw Roberts knocked down, heard cheers from the other cages, and then we made a dash for the cabin just as sailors and convicts were preparing to rush aft. The mutiny was on.

When sailors and convicts saw us disappear in the cabin, they realized that we were prepared for the revolt and could not be surprised and overpowered at a dash. They therefore returned forward to assist the rest of the prisoners on deck and consult on what was best to be done. On our side we barred the cabin doors, put the iron shutters over the skylight and informed the puzzled men and frightened women just what had occurred and what we proposed to do.

There were only seven men of us in the cabin—the captain, both mates, Haskell, Williams, Saunders and Smith. Mr. Williams was an old man and counted for nothing. Both cooks, the steward and the boy joined with the mutineers. Not a single man among the sailors came aft to cast his lot with us, though we had looked upon some of them as steady, honest fellows.

You may think there was great excitement among the women and children when they came to know the worst, but I can tell

you that they were very quiet over it. Helpless people are always that way in the face of great peril. They were white faced and trembling, but there was no wailing and wringing of hands. The cabin lamps were lighted, and the women and children sat about on the chairs and lockers, while the men made final preparations for defense and spoke in hushed voices.

The exception was in the case of the two single women. They had certainly been very foolish to strike up a romantic attachment with such villains, but it was plain that they had never contemplated a mutiny and the horrors that might follow. When they realized what had occurred and witnessed our grim preparations for defense, they became conscience-stricken and hysterical. Miss Foster admitted that her sympathies had been worked on until she had come to regard Ben Johnson as a martyr and had fished the bottle of croton oil from the dispensary at his request. She did not know the use he meant to make of it, however. Miss White confessed that she thought the doctor had been unjustly treated, and she had encouraged him to stand on his dignity, and at the same time had fallen in love with the villain York and become carried away with his tales of romance. Now that revolt and mutiny had come they realized the evil they had done and the position of all of us.

The mutineers gave us about half an hour in which to prepare for them. During this interval they got their breakfasts, passed about bottles of rum, which must have been smuggled aboard at the Cape, and sailors and convicts fraternized in a way to prove that they were not strangers to each other. Roberts we could plainly see from the portholes in front of the cabin. He had been knocked down and bound hand and foot, and his protests and entreaties were laughed to scorn. The half hour was nearly up before the doctor was hoisted into view from below. As he was the direct cause of the mutiny and had been overly kind to the convicts, he might have looked for decent treatment at least. To our surprise his hands were bound behind his back, most of his clothing torn off, and the blood on his face and neck proved that he had been brutally used.

The first move aft was made by York and Ben Johnson, one representing the sailors and guards and the other the convicts. They could not have known how well prepared we were in the cabin, but York displayed a flag of truce as the pair broke away from the crowd around the fo'mast. When they had come up to within ten feet of the cabin entrance, they halted, and the sailor hailed us with:

"Hello, in the cabin! Captain Clark, I have a few words to say to you!"

"You infernal pair of scoundrels! But I'm a mind to shoot you down in your tracks!" shouted the captain in reply.

"Go easy, captain!" called York, while Ben Johnson laughed his contempt for the threat. "You know what happened forward, of course. We are in possession of the bark. As we are not a crowd of lambs, we thought you might prefer to take the boats and go voyaging on your own account."

"That is the most of you," added the convict leader. "I've got an old score to settle with Tompkins and Mary Williams, and they needn't pack up to go along."

"Yes, I know you have got possession of the craft," said Captain Clark as he choked back his anger, "but if there is any taking to the boats, you'll be the one to go! If at the end of 15 minutes the convicts are not under lock and key and the sailors down on their knees and praying for my forgiveness, we'll open fire on you and sweep the decks of every living man."

"That's big talk, captain," sneered York, while the convict shrugged his shoulders and laughed loud and long.

They seemed to feel that it was the captain's ultimatum, however, and turned and walked forward. Five minutes later the doctor and Roberts were sent aft to talk to us. They had their hands tied behind their backs, and to prevent them from making a dash into the cabin each had a rope attached to him and the free end held by two mutineers. Roberts was only a countryman of limited education, while you will be ready to believe that the doctor was a man in whom no one need look for the heroic. There was a surprise in store for us as they came aft. The doctor had been made spokesman. Brief as the time had been, he fully realized the situation and knew that he alone was to blame for it.

"Captain Clark," he said as the pair halted within speaking distance, "the sailors have mutinied, and the convicts have been turned loose. I have been told to say to you that if you will consent to go away in the boats the two of us can go with you. If you refuse, we are to be put to death, and they further declare that not one of you will be spared."

"You see what you have brought us to," replied the captain, though his voice was more kind than reproachful.

"It is all my fault," continued the doctor, "and I am here to tell you to fight to the last, no matter what becomes of me."

"And the same with me!" shouted Roberts.

The doctor was about to speak again when the ropes by which the pair were held were viciously jerked by the mutineers, and they were pulled down and dragged forward. They would have been killed at once but for Ben Johnson and York, who had sense enough to realize that this was but the beginning and that they might be made useful later on. They received many a hearty kick and blow, however, before they were bundled down the forehatch to be locked up in one of the iron cages. As I have told you, there was but little wind, which was a fortunate thing for everybody, as the man at the wheel deserted his post when the outbreak occurred and left the craft to sail herself. As soon as they had disposed of their prisoners, the mutineers took in every sail and made all snug aloft, and the wheel was then lashed so that the

Hindu would drift off with her head to the breeze. They had to do this for their own protection as well as ours, but we were greatly relieved when we saw them set about their work.

As was to be expected, York and Johnson lost all control of the men before the mutiny was an hour old. There were singing, shouting, laughing and dancing, and of course they must hoist up water and provisions with reckless hand. Everybody had a plan for getting at us in the cabin, and everybody wanted to be boss, and long enough before noon there had been hard fighting among them and no little blood spilled.

## CHAPTER XII.

### THE INCIDENTS OF AN AFTERNOON.

At high noon some sort of a decision seemed to have been reached, as York came aft with a flag of truce and asked to speak to the captain. When told to go ahead, he said:

"Captain, we have given you plenty of time to consider our offer, and I have come for your answer. You can have the boats all fitted out, and the doctor and Roberts shall go with you. We are bound to have this ship and carry her where we will, and if you refuse our offer the results will be upon your head."

"Harkee, you bloody traitor and villain!" shouted the captain in reply, "We not only refuse your offer, but are ready for what may come!"

"Then you won't go?"

"Not a step. Begin the attack as soon as you please."

I stood behind the captain while he spoke. As he finished, I felt a soft hand on my arm, and I turned to find Mary Williams at my side. She was very pale, as was the case with all the other women and perhaps some of the men, but I could not fail to notice that she was also calm and collected.

"Mr. Tompkins," she said, pulling me a step or two aside, "there are but few of us and many of them. Will you show me how to load one of these weapons, that I may be of some assistance when the attack comes?"

"Lor bless you for your brave heart!" says I in reply. "But maybe it will be better if you look after the women and children a bit. I see you are the only woman who has a spark of courage left, though this is only the beginning of it."

"And what do you think of the situation?"

"It's a bad one, Miss Williams, as I'm in honor bound to say, but we are not at such a disadvantage as you may suppose. Those fellows know nothing of the iron shutters or of the number of guns at hand."

"You—you heard Ben Johnson say that you and I were not to go in the boats with the others?" she queried, with a break or two in her voice.

"Aye, that I did, but there will be no taking to the boats by any of us. The man means murder for both of us, but we won't let that bother us yet awhile."

"I want you to promise me something," she persisted, drawing me still further from the porthole. "If you are still alive when they break into the cabin, I want you to shoot me."

"Lor save you, miss!" I whispered, taken all aback by her look of appeal and strange words. "It will surely never come to that."

"But if it does?"

"Mary," says I, never knowing that I had spoken her given name and never knowing till long afterward that I took both her hands in mine, "if I had a dozen lives I'd give them all to save yours, and so I don't like to think of taking the only life dear to me in all this world. I'd rather see you dead, however, than in the power of that villain, and if worst comes to worst, I may give you my last bullet."

"Remember, Ralph. I shall depend upon it."

I had called her Mary, and she had called me Ralph. It was a declaration of love, made under such circumstances as were never known before. You smile at me, but as I told you in the beginning, I was but a plain sailor man and hardly knew the meaning of the word "romance." We were standing in the face of death, as it were, and yet I could have lifted up my voice and shouted for joy.

The numbers of the mutineers gave them confidence. They perhaps argued that a rush aft of all hands would carry our position, with little or no damage to their side. They gathered up whatever could be made to answer for weapons, and the cool and lawless way in which they made ready for the attack made us wild with anger and impatience. We could have poured a volley into them at any moment during the forenoon, but Captain Clark did not wish to be the first to shed blood, though he would have been fully justified in sweeping the decks. I believe he hoped, as I did, that something might occur to stop the trouble before any one was laid low. When it became evident that they intended to rush, he turned to me and said:

"I want every one of you to shoot to kill. Do not be satisfied with killing one man, but kill two or three, if you can. If we give them a good dose at the start, it will take the fight out of them. Every one to his post."

Thirty seconds later the whole gang of villains, York and Johnson leading, came rushing at us, and the yells they uttered would have done credit to a war party of savages. Eight of them carried a spare yard to be used as a battering ram, while the others had axes, capstan bars, iron belaying pins and what not. A few had muskets, but no spare ammunition. As the first of the mob passed the mainmast, we opened on it and quickly exchanged our guns to fire again. I believe that some of

our bullets hit two men, which was not at all unlikely in such a crowd. Some of them reached the cabin, and one burly, big ruffian lived long enough to strike one blow with his ax, but the rapid fire astonished them and the slaughter among them was so appalling that they broke back like a flock of frightened sheep. We kept peppering them until the last living man had disappeared below decks, and had we rushed out then we could have pulled the hatches on and made them prisoners. I was for doing so, but Captain Clark, who had perhaps considered the possibility before we fired a shot, pulled me back and said:

"Don't lose your senses, Ralph. If we had them all prisoners, we are not strong handed enough to sail the bark."

Of that gang of men 13 lay dead on the decks, and in addition there were three wounded men whom we let drag themselves away. Two of the dead had axes, and two more carried muskets. We wanted to get these, and so we removed the barricade from the door, and I was about to slip out, when Mary Williams dodged past me and was back in a minute with guns and axes. She would have returned for some of the wicked looking knives which had dropped from the hands of the sailors as they fell, but I seized her arm and pulled her into the cabin. It was high time, too, for a convict armed with a musket had hoisted himself out of the forehatch and fired at her, and the ball struck the casing of the door beside her head.

The position was now a curious one. We held the cabin and by means of the portholes could sweep the decks clean to the eyes of the ship, and yet we were prisoners. If we had been a few men stronger, we could have overcome them while they were still in their panic, but even to have stood guard over that gang of villains running loose between decks would have demanded the services of a dozen men. It was no doubt the wisest policy to be content with our advantage, though no man could predict how the affair would terminate. For an hour everything was quiet and not a mutineer showed his head. Then a white flag was hoisted above the forehatch, and York hesitatingly came aft to deliver a message. We had hoped that some of our bullets had found him or Johnson, or both, but it seemed that they were untouched. It was noticeable that York had lost his jaunty air and looked very much worried as he approached us, and his voice had lost all its impudence as he said:

"Captain Clark, I am sent to ask for a truce of half an hour, that we may clear the decks of the dead. At the end of that time we shall have something further to say to you."

As we wanted the bodies disposed of as badly as they did, no hesitation was made in agreeing to a truce. Three sailors and seven convicts came up, and with many a foul word and bitter curse they proceeded with their work. Perhaps it would have been expecting too much to suppose they would give the bodies burial in the regular way, but we were terribly shocked to behold them lift up corpse after corpse and heave them over the rail until the last was gone. When this work was completed one of them went aloft to search the sea for sight of sail, while the remainder, with the exception of York, dived below. When the man came down and reported and disappeared, York came aft to say:

"Captain Clark, the blood of every man killed here to-day is on your head. If you figure that one defeat will turn us from our plans, you are mistaken. We will have full possession of this craft if we have to fight you for a month, and sooner than be defeated in our object we will set her on fire and all perish together. I now renew you the offer to let you go off in the boats. It is the last time. It is for you to say whether you will save your people or let them stay to be killed. I will return in 15 minutes for your answer."

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You have less of praise than blame,  
Say not Love alone controls you;  
Call it by some other name.

Boast not you're a man of honor,  
Nor your noble deeds proclaim,  
To another, if you're leading  
Secretly a life of shame,  
Say not Honor has your fealty;  
Call it by some other name.

Say not that your master-passion,  
Is ambition, when your aim,  
Is by evil tricks to triumph,  
And to win unworthy fame,  
Say not that ambition moves you;  
Call it by some other name.

Plead not that a sense of duty  
Causes you to harshly blame,  
And exact a prompt obedience  
Of the cruel laws you frame,  
Duty's not the moving spirit;  
Call it by some other name.

Love is tender and forgiving;  
Honor has no part with shame;  
Pure ambition, Christian duty,  
Find in Love their vital frame,  
If Love does not lead you rightly,  
Call it by some other name.  
—Josephine Pollard in N. Y. Ledger.

## ONE BOLD, BAD BURGLAR.

## I.

"Isn't it perfectly dreadful? It seems there is no place secure from them. The papers contain nothing but burglaries, robberies and holdups. I am almost afraid to look under the bed at night."

Blanche Warden turned the rings on her fingers nervously as she spoke. She was not a timid girl, but the final test of bravery had never come to her.

What would you do in case a burglar entered your room, Mr. Dulano," she asked, addressing one of her callers.

"Exactly what I did last night," the gentleman replied.

"You surely didn't have a burglar last night?" Blanche cried.

"And why not? I'm keeping the affair quiet because I have a clew that is being followed up. Of course, it will be safe to mention it here," Dulano replied.

"To be sure. Do tell us about it," the girl said eagerly.

"It must have been about 2.30 o'clock this morning when I was aroused by someone turning a key in the door that communicates with the adjoining room. I'm pretty stupid when I first awaken; but I was soon aroused to full consciousness by something cold against my temple."

"Oh, how dreadful!" Blanche cried, shivering.

"That wasn't the funny part," Dulano laughed. "The part I object most to is what followed. The fellow held his gun calmly with one hand while he went through my clothes and helped himself to my watch, my diamond scarf pin, and all my ready change."

"At what time did you say that occurred?" Arthur Forrest asked.

"Well, I didn't have any watch to tell me the exact time; but after I had lain awake some three or four hours the chimes on Pilgrim church sounded the three-quarter hour, and after an equally long time the clock struck three," Dulano replied with a comical drawl.

"Guess it was watches he was after. He got mine at about the same time. Wonder if he visited any of the other fellows at our house," Forrest said.

"What! The burglar wasn't in your room, too, Arth—Mr. Forrest," Blanche cried.

"Yes, but he had the kindness to let me sleep until he got what he wanted. He awakened me as he went through the window," the young man replied.

"Oh, please don't tell me any more," Blanche exclaimed. "You will have me so frightened. And I have to stay in this great house with no one but the servants. You know poor Lena is very ill and papa and mamma were called to Chicago to-day, so I am alone," Miss Warden said, with more uneasiness.

"Really, Blanche, it isn't safe for you to stay here alone," Arthur said seriously.

"Oh, I'm not afraid. I'll put the jewels and plate in the big chest in the wine cellar and sleep with a revolver under my pillow. It would be real fun to have a burglar come," Blanche replied, laughing.

Then they dismissed that terror-inspiring theme from their conversation; but Arthur continued restless and uneasy. He stood at the window and gazed moodily out on the moonlit boulevard while his hostess played and sang. As Dulano turned the music for her, he whispered softly:

"Slip into the library a moment. I have something important to say to you." Then he said aloud: "I think I shall take a smoke in the library if I may be excused."

When he had left the room Blanche walked over to the deep bay window and laid her hand gently on Arthur's arm. "What makes you so silent this evening, dear?" she asked, tenderly.

"Oh, Blanche, I hate that Dulano. I suppose I am jealous, but I wish you wouldn't have him hanging 'round here," he exclaimed while his handsome face crimsoned.

"But, Arthur, you brought him here before you ever spoke of love to me. Surely you are not afraid of him now that you have my promise," the girl said, seriously.

"No, dearest, I do not doubt you. I felt sorry for him, a stranger there at the boarding-house. And, besides, I wanted him to meet the sweetest woman in St. Louis," he whispered as he pressed just a suggestion of a kiss on her cheek.

"By the way, I'll go and hunt up that

Harper for you, dear," she said with an effort at spontaneity that was not altogether a success. Then she left the drawing room; walked half way up the stairs, descended softly, and slipped into the library. Dulano was at her side in an instant.

"I'm sorry you spoke of the jewels and things," he said. "I have reason to think Forrest is the burglar. He has been losing heavily at cards lately, and is in danger of losing his position at the bank," he whispered hurriedly.

At the mention of Arthur's name Blanche would have cried out, but the man placed his fingers deftly over her lips. As soon as the speech was ended she fled to her room, hunted up the magazine, and returned to the drawing room. The two men were glaring at each other in angry silence when she entered.

"This call promises to be a game of freeze-out, so I guess I will leave and give you a chance to help Miss Warden put away the silver," Mr. Dulano said in a faintly sarcastic tone to Forrest.

"If Miss Warden desires my help I shall certainly remain," Arthur said, angrily.

"I shall require no assistance whatever," the girl said haughtily, and the two men departed together. For some minutes she sat in the drawing room, lost in dismal meditation. Arthur Forrest a gambler, perhaps a burglar! No, it could not be. And yet, why had he been so moody of late? Her heart was sore, and, with no thought of the valuables in the house, she dragged herself to bed. The night wore on, and sleep came not. The clock was just striking that hour of 3 when the door opened slowly, and she could see the shadowy outline of a man. For a moment she was paralyzed with terror. The scream that started from her heart lost itself somewhere in her throat. A thousand awful fancies chased each other through her mind as the man advanced to the bed. Then she thought of the revolver that she had intended to put under her pillow. Alas, it was peacefully reposing on the dressing table in her father's room. The man was tall and wore a black mask. He must be the same one who had visited Mr. Dulano and Arthur the night before. Perhaps it was Arthur. At the thought of her lover the blood went coursing again through her body, and, to her astonishment, she found that she was calm.

"Are you awake?" the burglar whispered, and his voice sounded strangely familiar.

"Yes," she said, faintly.

"Then get up. Don't be afraid. I am not going to harm you. I only want the family jewels. Take me to where they are kept," he whispered again.

At the sound of that voice the last vestige of fear left her. Imagination and outraged feeling smothered every other emotion in her heart. She would prove this lover of hers. Without a moment's hesitation she rose from her bed, glanced indifferently at the glittering barrel of the revolver in the burglar's hand, and walked over to the table, where she lit her little emergency lamp.

"Follow me; I am at your mercy, but I trust you are a gentleman, even though you are a burglar," she said in frigid tones.

Then she led the way through the corridor and down the back stairway to the pantry. Thence another stairway led to the laundry and cellars. Blanche, in her indignation, knew not that the granite floor was cold beneath her little bare feet.

When she had almost reached the wine cellar she remembered that the key was on her father's keyring, and was probably at that time in Chicago. An idea struck her.

"Here; you hold the lamp while I climb up and get the key," she said, indicating a niche high in the wall. The man's eyes followed her glance and he was lost. As quick as thought she blew out the lamp, hurled it in resounding fragments on the floor, and sprang upon her burglar like a tiger. The revolver was hers without a struggle, and the man was her prisoner.

"Are you Arthur Forrest? Speak, or I'll blow your brains out!" she cried.

"My God, spare me, Blanche, I am Arthur," the man whispered.

She covered him with the revolver while she backed across the laundry. When she had gained the stairs she bolted the door securely and fled trembling to the hall above. At the library door she halted and a low cry escaped her lips as she caught sight of another man in the open window.

"Blanche, my darling, are you safe?" Arthur Forrest cried, as he beheld her white-robed figure.

"How did you escape? I thought the outer door was locked," she said, as she repelled his touch.

"Escape!" the young man cried in astonishment. "I have been following him since midnight. One of my men who was left here to guard the house, tells me that he entered this window 10 minutes ago. The fellow was afraid to follow him alone. I have tracked him from Broadway and twice he evaded me. Where is he, darling?"

"Who—who is it you are looking for?" the girl gasped.

"Wallace Dulano. The officers are here to arrest him. Is he still in the house?" Arthur asked eagerly.

"There is no way of escape except up the pantry stairs," Blanche replied.

Then, while Arthur let the officers in, she slipped away to her room and donned her dressing-gown and slippers. In a few minutes she joined her fiancé in the reception hall. The gas was burning brightly now and she could hear the heavy tread of men as they took their prisoner from her impromptu jail.

"You are a brave little woman," Arthur said fondly as he led her to a divan.

"No, I am a miserable coward; but I am a proud woman, and when a woman thinks she has been wronged, fire and storm can not stop her," Blanche said, humbly.

"What do you mean by that, dearest," the lover asked.

"Oh, Arthur, he lied to me and I believed him. He told me that you were the burglar and I thought you were using even my love to further your own wicked ends. That is

why I had courage to walk downstairs at the end of a revolver. Can you ever forgive me for cherishing such an ignoble thought?" she cried as she buried her face on his breast.

"Yes, my darling," the young man said tenderly. "But I have stolen something that is of infinitely more value than your plate of jewels. I have stolen this noble heart, and I am willing to admit that I am a bold, bad burglar."—Emily R. Schmidt, in St. Louis Republic

## VARIETIES.

**MORE THAN HE EXPECTED.**—An old man was breaking stones one day on a country road in Wales, when a gentleman came riding along. "Bother these stones! Take them out of my way!" he said. "Where can I take them to, Your Honor?" "I don't care where; take them to Hades if you like." "Don't you think, Your Honor," said the old man, "that I'd better take 'em to Heaven? They'll be less in Your Honor's way there."—Spare Moments.

**REASON ENOUGH.**—Up in Michigan a Sabbath school superintendent, at the close of an address on the creation, which he was sure he had kept within the comprehension of the smaller scholars, smilingly invited questions. A tiny boy, with white, eager face and large brow, at once held up his hand. "Please, sir, why was Adam never a baby?" The superintendent coughed in some doubt as to what answer to give, but a little girl of 9, the eldest of several brothers and sisters, came promptly to his aid. "Please, sir," she said smartly, "there was nobody to nuss him."

**HARD TO CATCH A SCOTCHMAN.**—In a certain hotel in New York there was a Scottish night watchman, whose only fault was a consuming partiality for a little whisky.

The old Scot did not take kindly to a system that required him to go through the hotel at certain hours to touch an electric button in various places; and in order to evade it he fixed up an automatic arrangement which so baffled the manager that he got rid of it, and finally a pedometer was given the old Scot to carry on his nightly rounds.

This pedometer was intended to register every step taken by the watchman in his usual nocturnal progression.

All went well the first two nights, but on the morning following the third night the old Scot was missing.

Search was made, and he was found sound asleep in the engine-room, and it was further discovered that he had ingeniously attached the pedometer to the engine's piston rod, so that at every stroke it registered a step.

According to the pedometer the old Scot had travelled 213 miles!

**BIT OFF HIS ADVERSARY'S THUMB.**—A Washington attorney had a caller yesterday.

He was an uncouth looking individual, and said he hailed from Montgomery County, Maryland.

"Judge," he said, "I reckon I'll have to buy a few words of advice."

"Well, what is it?"

"That's a sto'keeper up my way, and I've had a good many dealin's with him, but last night I reckon I've seed him put his right thumb in the scales a hundred times when he weighed things I bought."

"Well, you ought to have stopped him. You cannot collect damages for that," interrupted the attorney.

"I don't want no damages."

"Well, what do you want?"

"Yo' see, we got in a fount yestiddy and I bit off that thumb, an' I want ter know if, as many times as I bought it, I don't own it, so that he kain't git damages for my bitin' it off."—Washington Star.

**ONLY KEEPING GAME.**—Stories of noted gamblers were in order last night, when the following was told of the late Charles Perkins. Charley was playing seven-up with a friend who knew him very well, and Charley was not playing the squarest game in the world. His friend remonstrated with him something as follows:

"Look here, Charley, you know you can beat me playing this game 'shoes to plates,' and I don't mind you winning my money on the square, but you can win it fast enough without cheating."

"I couldn't cheat you. I don't know how. I wouldn't if I could, and I couldn't if I would."

Spades were trumps, and Perkins was the dealer, when his friend, reaching across the table, suddenly grabbed his right hand, and, turning it over, exposed the ace and deuce of spades, which he was holding out in his capacious palm.

"There! What do you call that if you're not cheating, Charley?"

"Do you think I was trying to cheat you?"

"It looks like you were, doesn't it?"

"Well, now I begin to believe you don't know much about this game. I thought you knew seven-up pretty well, but now you don't seem to know enough to pound sand."

"Well, I know when I see a man holding out, anyway."

"I wasn't holding out, you darn fool; I was

keeping game. Don't you see? You're two and I'm one."—New Orleans Times Democrat.

**A HOT RETORT.**—The Widow Teeter's husband had been dead only a few weeks when there were surface indications that she was about to marry again.

The late Mr. Teeter had not been exactly a model husband, and it was the general opinion that his death was a stroke of good fortune for Mrs. Teeter, but still the relatives of the deceased thought that his memory required a widowhood of at least a year. When the indications of the approaching marriage became apparent, some of her late husband's friends waited on Mrs. Teeter, and one of them said:

"We hear that you are about to marry again, Lucy Ann."

"Well, I don't know that it is any of your business," replied Lucy Ann, "but if it will give you any satisfaction to know the facts, I don't mind telling you that I shall be a married woman again in about two weeks."

"But Tom has been dead less than three months," protested another.

"Well, I suppose he's as dead as he ever will be, isn't he?"

"But," said a third, "you ought in common decency to wait until he is cold."

"Wait until Tom Teeter is cold!" repeated the widow, with fire in her eye. "If your theological belief is orthodox, you must know that Tom Teeter hasn't got a ghost of a show of ever getting cold."

Then the objecting relatives filed out, and Mrs. Teeter resumed the work of preparing her trousseau.—Truth.

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DETROIT, SATURDAY, JAN. 9, 1897.

This paper is entered at the Detroit Postoffice as second class matter.

### DOWN WITH THE GREENBACK.

This seems to be the battle cry of the great mass of bankers, free trade newspapers, and the present national administration. However these classes may differ on other points, they agree on this one, and are unanimous in their demand that the greenback be retired. It is singular that for 30 years, while the nation was enjoying an era of prosperity surpassing any like period in its history, that no one seemed to regard the greenback as threatening disaster to our national finances. But as soon as the peculiar economic ideas of these gentlemen controlled the policy of the government, and disaster and lack of confidence in industrial conditions caused general stagnation and depression, the greenback was brought forward as the primary cause of these troubles. To thinking men, however, it must be apparent that the greenback was not the cause of financial difficulties, but only a symptom that the finances of the government were badly deranged through inefficient management, and that the retirement of the greenback could not cure a disease originating from other causes than its existence.

The government, through those controlling its policy, had simply placed itself in a position where its expenditures were greater than its receipts, and as a result any claim against it threatened disaster. It is true the Secretary of the Treasury, Mr. Carlisle, in his recent report, insists that there would have been revenue enough under existing laws, providing everything had worked as he and his friends claimed they should; but his own report gives figures which plumply contradict the assertion. According to that report, from March 1, 1893 to December 1, 1896, the receipts from all sources have been \$1,171,882,091.23, and the expenditures have been \$1,369,966,193.89, showing a deficiency of \$188,084,104.66. Now, those figures furnish the real reason why the government has had to issue bonds to secure needed funds. The Secretary says, in effect, that greenbacks were used to draw gold out of the treasury, and that he had to issue bonds to buy gold to replace it. But he neglects to state that these greenbacks were as good as gold, were used by him as gold, and paid out again as gold, so that the effect upon the treasury was practically nil. The "gold reserve," the Secretary stated in a letter to Congress a year ago, never practically existed, and was included in and treated as a part of the cash in the treasury. If the cash had not run out, through lack of receipts to balance expenditures, the gold reserve would not have decreased. Besides, the secretary actually borrowed \$293,798,869.66 nominally to keep up a gold reserve of \$100,000,000. He has also, without warrant of law, practically retired many millions of demand notes, which he could have paid out

for current expenses of the government. This curtailment of the currency was a serious detriment to the business of the country.

The Secretary of the Treasury urges that interest-bearing bonds be issued to retire the greenbacks, and thus convert a debt of \$346,000,000 bearing no interest, and extremely useful as a safe currency, into an interest-bearing debt, upon which the people would have to pay annually \$10,000,000 to \$11,000,000 in interest. It is not at all probable Congress will act upon Mr. Carlisle's recommendation, so long as interest-bearing bonds are to be redeemed.

### THE REASONS.

Denmark has less population and area than Massachusetts, but exports twenty times as much butter as the United States. The butter is made by the girls (who have been trained to do this and other farm occupations in the public schools) and is bought readily by the English, who know it is clean and not tainted with margarine. Much of it is put in small tins holding from one-half pound to twenty-eight pounds and surrounded by rice husks in wooden pallets. They also make a specialty of selling frozen milk, which, when thawed out after even two days, is perfectly fresh.—*Agriculturist*.

To put the case fairly, the *Agriculturist* should state that while Denmark, with less population and area than Massachusetts, exports twenty times more butter than that State, each person in Massachusetts consumes three times as much butter as each person in Denmark, and pays a higher price per pound for the best butter than Danish butter averages in the English market. If the United States exported all its best butter, and consumed the poor stuff, or substitutes in its place, she could figure more prominently as a butter exporter. But her people are not willing to do this, and therefore cannot compete in exports with those countries that do. The average American is the best customer the American butter-maker can find on the globe today. He is willing to pay more for a choice article of food than any one else. Hence exports of butter and cheese are always of second and third-rate quality. It is frequently said, and with truth, that European nations only consume what they cannot sell, while Americans only sell what they cannot consume. That statement explains the reason why foreigners so frequently acquire wealth in this country in competition with native Americans. Whatever is marketable is sold, and what is not is consumed. The second generation is generally the reverse in this respect of its parents, and live the same as other Americans. Which is the wisest course to pursue each must judge for themselves. One thing is certain, you cannot have your cake and eat it too. You cannot export large amounts of high-priced butter and consume it also. When the *Agriculturist* gives one side of a question it should follow the statement with the facts on the other so that no one will be misled by its statistics or assertions. The deduction which nearly every one would draw from the paragraph quoted above, is that very little butter is produced in the United States, and that of poor quality. As a matter of fact, however, as good butter is made in this country as anywhere else, and the makers get as good average prices for it as those of Denmark or any other country.

THE Rinderpest, a fatal contagious disease that attacks cattle, has ravaged the entire eastern coast of Africa, destroying an immense number of animals, and has reached the Transvaal and Cape Colony. Originating in southern Russia, it has at various times ravaged the greater part of Europe, and required heroic measures to stamp out. All ruminants are liable to be affected by the disease, for which no remedy has yet been discovered. It is liable to be brought into a country by hides taken from animals which had died from the disease.

THE Bureau of Industries of Ontario has published its final estimates of agricultural products for the past year. Fall wheat is reported to have returned an average of 17.2 bushels per acre; spring wheat, 13.8; barley, 27.4; oats, 34.2; rye, 15; peas, 21.1; buckwheat, 17.9; beans, 17.5; potatoes, 119; corn, 75.8 bushels ears; hay and clover, 0.93 ton; mangel wurzels, 467 bushels. The Bureau reports a decrease in the number of horses and sheep, and a small increase in cattle and hogs. There has also been an increase in poultry. The wool clip has decreased, and the entire clip for the province is only 5,581,387 lbs. In dairying the returns are favorable. The quality of the butter has improved, and cheese factories kept open longer the past season than usual, owing to the advance in prices of the product.

### THE BEET SUGAR INDUSTRY.

A dispatch from Washington, dated December 27th, says:

"The extent of the German beet sugar industry is shown by Consul Monaghan at Chemnitz, who, in a report to the State Department, says 958,128 tons were exported in the last fiscal year, and the home consumption was estimated at 608,800 tons, the latter being an increase over the previous year of 116,165 tons. The Consul says the industry has made huge strides in a dozen years, with intelligent Governmental aid, but its manufacturers were energetic as well. He thinks beet planting, particularly in Ohio and Nebraska, should take the place in part of the raising of meat and grain, where competition is sharper, and that the United States ought to supply its own sugar. This he thinks can be accomplished with Governmental as well as popular encouragement."

Consul Monaghan is entirely right in his conclusions. The sugar beet ought to be cultivated to a sufficient extent in this country to furnish its own people with all the sugar they require. It would be a boon to every American grain grower, for the land required for the purpose would be taken from the area usually sown to grain, and to that extent would cut down competition. Then the immense sums sent abroad for sugar, some \$75,000,000 annually, would go to enrich American beet-growers instead of those of Germany and France. But Consul Monaghan points out very clearly why Germany, in the past few years, has dominated the sugar markets of the world, and rendered unproductive the cane plantations of the West Indies, though they are cultivated with the very cheapest labor that can be employed. "With intelligent governmental aid," says the Consul, "the industry has made huge strides in a dozen years." So it has. Beet sugar is the basis of the agriculture of France and a large portion of Germany. It has shut up every British refinery, and will soon cause the cane plantations of all countries to be abandoned where the industry is left to care for itself. The only remedy is to adopt the same methods which France and Germany have found to be so potent. In no other way can the industry ever be made of any importance in this country. The heavy expenditures required for factory plants will deter any capitalist starting into the business without a guarantee that his investment will be protected against the disastrous competition which will surely come from the countries which enjoy the certainty of governmental aid.

The United States has more land suited to the beet sugar industry than all Europe, but it will never be made available so long as present conditions obtain.

As a question of finance it appears to us that the keeping of that \$75,000,000 at home, and the addition to it of some 15 or 20 millions more, which would be expended and circulated in this country, would not only prove of immense benefit to the agricultural interests, but to every citizen engaged in a productive enterprise.

### PROSPERITY HAS NOT YET ARRIVED.

The close of the year, and the opening of a new one, a time when business men generally look over the results of the past year and take a look ahead, emphasizes the statement made several weeks ago, that the prosperity expected by financiers to follow the recent election has failed to materialize. In fact, beyond the settlement, for a time at least, of the status of silver in the United States, and thereby relieving apprehensions as to future trouble with the currency, nothing has yet been realized in the way of added prosperity. Banks are suspending, mostly, we must say, however, on account of the illegal and fraudulent methods pursued by their management, and business failures are as frequent as ever. We do not believe any improvement of an abiding character need be looked for before spring. Bradstreet's trade review of Saturday last, says of the situation:

"General trade has been rather more quiet, and this week proves one of the duller of the dull season which has followed the fortnight of revived demand early in November. The uneasiness last week caused by northwestern bank failures is continued by similar embarrassments at Chicago and Minneapolis. These bank failures seem to be the outcome of conditions originating in the banks and not due to the situation of general trade. Unseasonable weather, the marking of inventories and the customary absence of demand in wholesale lines have combined to produce more than the usual holiday dullness."

R. G. Dun & Co., in their weekly review, say:

There have been more commercial failures in 1896 than in any previous year except 1893, about 14,890, against 13,197 last year, with liabilities of about \$225,000,000

against \$173,196,000 last year, an increase in number of about 13 per cent and in liabilities of 29 per cent.

The year closes with an epidemic of failures, mainly at the west and in banks, loan and trust companies or concerns dependent on them. The action of clearing houses in various places indicates no want of confidence and several banks which have failed will be enabled to pay in full, but disclosure of unsoundness in a few widely known institutions in the abnormal state of popular feeling after an exciting contest on the monetary issue has caused distrust and suspicion where it is frequently undeserved. There has been no monetary pressure to cause trouble, nor have important western products declined in value. There has evidently been too liberal assistance given by some fiduciary concerns to speculative operations. No drain on eastern funds has resulted since the first alarm at the two large failures and the money then sent has all returned. Failures often grow more frequent as annual settlements approach. Holiday dullness has been intensified by the failures and the efforts of great combinations to make new arrangements. With iron, coke, wool, cotton and hides all somewhat lower, there is almost universal confidence that business will soon become large and safer than before for a long time.

We believe that the only hope for the future showing an improvement over the past four years of stagnation, depression and disaster, lies in a complete change from the conditions which produced them, and this cannot be accomplished before next spring.

### FLAX AND JUTE.

We recently referred to the cultivation of flax in this country as an industry which could be made profitable under certain conditions. Since that article was written a number of parties interested in its culture have appeared before the House committee on Ways and Means, and their statements are strongly corroborative of what was said in the FARMER. On January 2d, when the schedule on "flax, hemp, and their manufactures was up for discussion, William Rutherford, of Oakland, Cal., was the first party to be heard." Mr. Rutherford said in substance:

"We are engaged in making twine, yarn and cloth in a great many varieties. The first of these mills was started there about 30 years ago, and within that time the business had increased largely. They now wanted a reasonable protection to run their mills, and he suggested such changes in the tariff as were considered necessary for that purpose. The manufacturers of California, he said, in the last election had given their votes for protection, thinking this the quickest way to give employment to the idle, protection to themselves, and revenue for the Government. The mills of the United States have been active in keeping down the price of these goods to the farmers. Up to the passage of the Wilson bill a fair duty had been given the industry. The measure benefited the mills of Calcutta and other foreign countries at the expense of the domestic manufacturers. Between 1893 and 1895 the imports of jute and burlaps more than doubled. Under the clause in the free list admitting cotton bagging and certain goods made of burlaps, importers were bringing in cloths of various kinds, including horse and carriage robes. This was not fair nor the intent of the Act, but the words 'all such material' used in the Act enabled the goods to be brought in."

The chairman inquired of Mr. Rutherford whether his industry had been successful after the passage of the Tariff act of 1890.

Mr. Rutherford replied: "Yes, sir; very successful. The duty was taken in that act off the raw material, and that gave us an assistance of \$15 per ton on jute. We were never better off than from 1890 to 1894, when the Wilson Tariff act was passed."

Leslie Coombs, of Kentucky, once a large flax-grower, said:

"Previous to the passage of the present tariff law he had been the largest hemp grower in this country. His business had been practically destroyed under the law, and he had not grown a pound for several years. The putting of sisal grass, manilla and jute on the free list had greatly damaged the hemp industry. At the time of the formation of the McKinley bill the growers of hemp did not understand the danger from these substitutes." He asked for a duty of \$30 per ton on Russian and Italian hemp and \$25 per ton on manilla, sisal grass and jute. He also wished a clause placed in the law making it a crime to sell jute goods, colored and dyed, as hemp. It was an outrage to allow cheap common jute products to be brought here from abroad and passed off as the genuine Kentucky hemp.

Representative Van Horn, of Missouri, followed Mr. Coombs, and spoke of the destruction of the hemp industry in his State. Farmers of Missouri, he said, would be glad to return to hemp-raising and would do so if protection was afforded. From experience he was convinced that the manufacturers got more than their share of protection, while the producers of raw material did not get enough.

J. N. Bemis, of Boston, representing the burlap bag manufacturers of this country, said that in case a high duty was imposed on jute and burlap cloth the India Government would meet it by giving an export bounty on the products. If it was necessary to obtain some duty from burlap cloth, he asked that it not exceed a half-cent per pound, and that the return of



second-hand bags made here be prohibited, as it would lead to fraud.

C. E. Pearce, of St. Louis, representing the manufacturers of cotton bagging and cordage, asked for the restoration of the duty on these articles provided in the McKinley bill. If he had the formation of a tariff bill he would protect all vegetable fibres grown in this country. Japan was making great strides in manufacturing. She was now making extensively matches, brushes of all kinds, watches, clocks, cotton, silk, steel vessels, engines, matting, wire nails, straw hats, carpets, laces, shoes, trunks, leather goods, glass, bamboo goods, etc. Under the Gresham treaty any American could take his plant to Japan and do business. Labor there would cost from 5 to 18 cents per day, and this was the condition Americans had to contend against. He said that the free importation of jute and other fibres has displaced annually 2,000,000 bales of American cotton. In his opinion cordage could stand a reduction (under the McKinley rate), of from 1½ cents to one cent, and binding twine from seven-eighths of a cent to about a half-cent.

R. W. McCreery, of Frankfort, Ky., said that he was president of a company which had been making hemp binding twine for a number of years. He wanted to say that the product was an excellent one, and could be successfully made here.

Mr. Pierce, replying to a question, said that jute or ramie could be grown any place south of Lexington.

J. W. Bell, of Andover, Mass., said that his mill did not use American flax. He had used some from Canada, but most of their product came from abroad. He had tested a sample of flax grown, he thought, in Minnesota, which promised well. It was only a sample, however, and had not been manufactured. American flax, he said, was grown more for the seed than the fibre.

In regard to the statement of one manufacturer that jute could not be grown in the United States, we take some quotations from a pamphlet just issued by the Department of Agriculture, and entitled "A Report on the Culture of Hemp and Jute":

During the fiscal year 1894-95 over 160,000 tons of jute fiber and jute butts were imported into this country for manufacture, worth nearly \$4,500,000, yet jute is the cheapest fiber that comes to our market and, as I have shown, a substance that could be replaced in several important uses by other fibers. It has distinctive qualities, however, and in certain manufactures doubtless could never be superseded by other forms. A chief advantage in its favor is its perfect adaptability to culture in the southern portions of the United States, which, with the large yield of fiber per acre, emphasizes the possibility of making it a staple production.

As long ago as 1874, after the plant had been successfully introduced upon American soil, India officials wrote thus of its possibilities to American agriculture:

Competition of a serious kind, however, may be apprehended from North America. In some of the states of the North American Union the jute plant has been very successfully introduced, and has already been found to be more remunerative than cotton. It is very likely that in a short time the bulk of the requirements of the United States will be supplied by the home-grown fiber, and the demand on India will fall off—as regards gunny cloth, it has already fallen off—and in time American jute will be in a position to compete with the Indian produce in the markets of Europe.

With these facts in view, the growth of jute in the United States is worthy of serious consideration.

The pamphlet then gives a history of the industry of jute growing, from which we take the following:

"Up to this date (1871-72) hemp and flax had been used to bale the cotton crop of the United States, and jute as an article of import, occupied a very small place. The year 1872, however, saw the native fibers superseded by the India product, particularly in the West, resulting in the almost total destruction of the industries they represented.

"As already shown, the present imports of fiber into this country are enormous, while the exports of raw fiber to all countries from India amounted, in 1894-95, to nearly 649,000 tons, the exports of manufacturers also showing large figures.

"The interest in jute cultivation in this country had its beginning just prior to the time that the fiber began to be largely imported. The Department of Agriculture directed attention to the culture as early as 1869, and in 1869-70 procured from France and India a quantity of seed for distribution. As a result, hundreds of little cultural experiments were conducted in the South from the Carolinas to Texas, and ample proof was secured that the plant was adapted to cultivation in the United States. It is unnecessary to give special reference to the favorable testimony published at the time, further than to state that the annual and monthly reports of the department for five or six years following 1870 contain many articles and communications on the subject, which form an authentic history of the American introduction of the plant, and the effort to establish it in cultivation. That these efforts failed to give practical results is due largely, no doubt, to the absence of adequate machinery with which to prepare the fiber for market, this being the stumbling-block that has prevented success and hindered advancement in new and promising fiber industries even at a later period.

"The failure to establish the industry in the early seventies did not prevent further effort, for experimental culture has been continued at intervals down to the present time, the advent of a new invention for stripping the fiber often proving the stimulus.

"As to the samples of fiber produced from American-grown jute, they have been proved equal (and in some instances superior) to the India product. Some very excel-

lent samples of fiber received by the Department from Louisiana in 1873 were pronounced by competent judges to be 50 per cent better than the foreign fiber as imported."

There is no doubt both flax and jute can be grown in the United States, and to as large an amount as the demand will justify, under proper conditions. The result would be beneficial to all agricultural interests by diversifying products and reducing competition on lines where it is at present excessive. If jute is a southern product, flax is a northern one, and the cotton-grower of the south and the grain grower of the north would each share in the benefits arising from the building up of the fiber industry.

For the Michigan Farmer.

#### A FEW LINES FROM KALKASKA COUNTY.

Not all of the best farmers write for the MICHIGAN FARMER, and not all that write for the paper are good practical farmers, and I will put myself in the last class.

I remember some years ago, while living in the south part of the State, a certain party, (I won't call his name, he may be living yet) was often said by those who knew him, to hardly have an equal for an agricultural speech at the county fair, but practically was a poor farmer—could talk good, but failed to practice what he talked. The writer does not claim to be very much of a farmer, but is pleased to see some that are partially successful, even with the disadvantages of this heavy timbered country. A good many fall who ought to do better; the reason is the waste; they don't save what they get; too much goes to waste in many ways. One is in not caring for their tools; some are left to decay and rust through the winter in the fields where they were last used. Some real up-to-date farmers buy good tools and have hard figuring to pay for them and then do not get value received for the money invested because they are not sheltered and kept in in repair. All are not of this class, but some are.

I see in the meetings of a number of the Farmers' Clubs the good roads question is talked up, but no real practical way of improvement is brought out. We have had lots of talk for a good many years, and still not much improvement on the roads of twenty and thirty years ago. The county system has been adopted here the past season, and we have samples of some of the best and most substantial roads in the county, or in any other county. To be sure the cost is something—about \$5 per rod. The county commissioner is doing well in the new enterprise, and some that have opposed the county system on account of the cost will perhaps think more favorably of it.

F. M. Bronson's article on poultry and houses, in Nov. 25, and H. Voorhees' in Nov. 26, on "When to Sell," are worth reading the second time. Lots of good reading in the paper. WM. RICHARDSON.

In the list of Farmers' Institutes recently published, the places where those for Monroe and St. Clair Counties would be held had to be omitted. They have now been selected, and will be held at Monroe and Emmett respectively.

List of patents on agricultural inventions issued during the week ending Dec. 29, as reported for the FARMER by O. E. Duffy, 707 G. Street, N. W., Washington, D. C.: E. R. Allen, Corning, N. Y., potato digger; W. H. and J. Butterworth, Trenton, N. J., threshing machine; P. H. Connor and L. Clark, Monticello, Ia., corn husker; F. O. Kinney, Egypt, Ark., combined harrow and roller; M. L. Manley, Ferry, Mich., potato planter; W. H. McMullen, Lafayette, Ind., plow attachment; L. C. Miller, Cedarville, Kans., wheel harrow; O. C. Miller, Harveyville, Kans., corn harvester; J. Odell, Excelsior Springs, Mo., corn harvester; C. Quintus, Freeport, Ill., threshing machine; D. Rawl, Batesburg, S. C., cotton picker.

THE annual report to the President of John J. Brice, Commissioner of Fish and Fisheries, indicates how important the work of his office has become. No less than 48,000,000 shad eggs were collected, and 93,000,000 fry planted in streams emptying into the Atlantic Ocean and the Gulf of Mexico. The increase in shad eggs collected was 30,000,000 over the previous year, and if a bill now before Congress is enacted into law auxiliary stations will be established on most of the important rivers of the Atlantic coast, and result in an immense increase in the output of this species. The output of lobster fry was 97,000,000, against 72,000,000 for the previous year, and Commissioner Brice says that there is little doubt that the output in another year will be increased more than 100 per cent. While the attempt to keep up the constantly decreasing supply of mackerel along the New England coast was more or less experimental, 24,000,000 eggs were collected in Buzzard's Bay and 17,000,000 fry were liberated from them. According to the report a great increase in results at a large saving of expense was accomplished with reference to salmon hatching on the Pacific coast. Temporary stations were established on the Salmon and Little White Salmon rivers, both tributaries of the Columbia, to be operated in connection with the permanent station at Clackamas, Ore. It is proposed to extend over the entire country a permanent and commercial system of maintaining the commercial fisheries by grouping about the central hatcheries auxiliary egg-collecting stations to be operated only in the spawning season.

#### NEWS SUMMARY.

##### Michigan

Breeders and fanciers of poultry at Grand Ledge have organized a poultry club.

Sir Joseph Hickson, the late general manager of the Grand Trunk railroad, died in Montreal, Canada, last Monday.

Vermontville has organized a business men's association, to encourage factories and promote the business interests of the town.

A disease called cow-pox is attacking the children in Wayne and Oakland counties. It is said to be a mild form of small-pox.—*Emory City Times*.

A State Farmers' Institute will be held in the court house, at Howell, on Friday and Saturday, Jan. 15 and 16. A full program has been prepared.

Bank Commissioner Ainger last week ordered the State Bank of Whitehall to close its doors, as an examination showed the institution to be in bad condition.

Supervisors of Delta county have decided to submit the proposition of bonding the county for the sum of \$175,000 for road purposes to a vote of the people at the April election.

The Oakland county farmers' institute will be held at Milford, Jan. 13 and 14. Strenuous efforts are being made to make this meeting one of the best ever held in the county.

Fruit men in some parts of the State entertain slight fears that the recent mild weather may have been injurious to trees, as the buds are reported to have started in some localities.

Farmers in the vicinity of Plymouth will hold their farmers' institute in the Plymouth village hall, Jan. 14 and 15. The women's section will have its session the afternoon of the last day.

Beet sugar raising is being discussed by farmers in the vicinity of East Tawas. An effort will probably be made to have the legislature pass a bill providing a bounty for those who decide to experiment with the new industry.

A petition will be presented to the legislature this winter asking that steps be taken to improve the bed of the Kalamazoo river. Every spring the lowlands overflow and many people suffer loss.—*Marshall Statesman*.

A Fennville man was recently convicted of failure to mark fruit packages in accordance with the law and was sentenced to pay a fine of \$25 together with costs amounting to about \$15. Several similar cases are to be tried in the same court next month.

Governor-elect Pingree went to Lansing on New Year's day and quietly took the oath of office. He was accompanied by his family and a few friends. His family will not remove to Lansing. Gov. Rich, the retiring executive, will devote his attention to his business interests.

The great plant of the Collins Manufacturing Co., at Jackson, was recently sold at public auction by Trustee Wilson for \$75,000. It cost nearly \$200,000 three years ago, and was bid in by the first mortgage holders. An effort is being made to reorganize the company and continue the manufacture of carriages.

Representative R. D. Graham, of Grand Rapids, will introduce a bill in the legislature calling for the inspection of trees in this State with a view to controlling tree diseases. The bill will provide for a state inspector, who, however, will receive no salary, but will be one of the agricultural college faculty.

At the caucus of the republican members of the house of representatives last Tuesday it was unanimously decided to name Speaker Gordon for re-election as speaker of the house. At the senatorial caucus Senator Preston was chosen for president pro tem of the senate. Both houses of the legislature met on Wednesday for the purpose of ratifying the action of the caucuses.

About 30 Michigan people recently moved to Alameda, Ala., a point on the Mobile & Birmingham railroad about 90 miles north of Mobile. They report that the co-operative land company which induced them to go there clearly misrepresented things in its description of the climate and natural advantages of that region. Some of the party have left Alameda in search of work, while the others have written their friends for means to return.

An inventory of the old town of Ontonagon at the opening of the new year, showed about 100 houses on the outskirts, about 200 new ones, many of them nothing but small shanties, 13 saloons, 12 business houses, 2 barber shops, 2 churches, a postoffice and depot. There are something over 1,000 people in the old town, nearly one-third of whom are supported by the relief committee, and must be so supported until spring. At the present time there is no work to be had in or near the town.—*State Republican*.

##### General.

The Great Northern Railway has begun a tunnel through the Cascade mountains which will cost \$4,000,000.

Gov. Altgeld, of Illinois, last Tuesday granted pardons to twenty convicts, twelve of whom had been convicted of murder.

The dedication of the Grant monument in Riverside Park, New York, has been set for April 27. One of the features of the ceremonies will probably be a big naval parade in which other nations will participate.

A violent tornado struck the little town of Morningsport, La., last Saturday afternoon. More than a dozen people were killed and only two houses remain standing.

The Chicago city council has passed an ordinance prohibiting women from wearing any kind of a hat or bonnet in a theater under penalty of a fine of \$25 to \$100 for each offense.

Gen. Francis A. Walker, president of the Massachusetts Institute of Technology, and widely known as a political economist and litterateur, was stricken with apoplexy at his home in Boston last Tuesday morning and died soon afterwards.

The Pennsylvania legislature has chosen State Senator Boies Penrose to be the successor of Senator Cameron in the United States Senate. Ex-Postmaster General Wanamaker was also a candidate, but Penrose defeated him in the republican caucus by more than 50 votes.

Joseph B. McCullagh, editor of the St. Louis *Globe-Democrat*, committed suicide last week by jumping from a window of his room to the pavement below. He had been ill for several months and had grown despondent and tired of life. He was only 54 years of age.

Hon. John R. Tanner, Illinois' governor-elect, was married to Miss Cora English, of Springfield, Ill., Dec. 30. The wedding was a great society event, more than 1,200 invitations having been issued. Governor-elect Tanner takes the reins from Gov. Altgeld's hands on Jan. 11.

Mrs. Henry Ward Beecher met with a serious accident last week while visiting her son-in-law at Stamford, Conn. The lady, who is now 84 years of age, was attacked with dizziness, and in falling broke her hip in such a way that she will probably never walk again without the use of crutches.

Nashville, Tenn., suffered a disastrous fire last Saturday night. Nine stores and the south end of the city market house, containing offices of heads of city departments, were destroyed. The total insurance is somewhat in excess of \$300,000. The total loss is estimated to be from \$375,000 to \$400,000.

Senator Wolcott, of Colorado, last week sailed for England to attend an informal monetary conference which will be held in London before the end of the present month. France, Germany, and Russia will also be represented, and it is expected that a formal meeting for the discussion of an international bimetallic agreement will grow out of this conference.

The tug *Commodore* bound for Cuba with a light cargo of arms and ammunition was sunk last Saturday morning about 20 miles off New Smyrna. There were 28 men on board, only 17 of whom have thus far been found. Only a few managed to reach the shore alive. The vessel was supposed to have sprung a leak but it is now claimed that one of the crew—a traitor in Spanish pay—was the cause of the leak.

W. A. Hammond, vice-president of the defunct National Bank of Illinois, committed suicide by drowning himself in Lake Michigan, near his beautiful mansion in Evanston. He was missed from the house shortly after midnight and the body was recovered about noon of the following day. The president of the bank being in feeble health, Mr. Hammond had for several years been the responsible head of the concern and he himself contracted the large loans which finally caused the downfall of the institution. Irregularities in his accounts are alleged to have existed and fears of an investigation probably led him to take his own life.

##### Foreign.

The French government has abolished slavery in Madagascar. Severe penalties are imposed for violations of the law.

Hon. William E. Gladstone celebrated his 87th birthday, Dec. 29th. He received congratulatory telegrams from all parts of the world.

A dispatch from Honolulu early in the present week stated that the death of United States Minister Willis was hourly expected. He has had pneumonia for some weeks.

The situation in Cuba remains very much complicated. The death of Maceo is still a matter of dispute, late dispatches stating that he is alive and will recover. Little activity is being shown by either army and it is reported that Spain contemplates the recall of Gen. Weyler and the appointment of a more able officer. Fillibustering vessels appear to have little trouble in evading the revenue cutters and are busily carrying arms and supplies to the insurgents. Secretary Herbert has lately ordered several cruising vessels to Florida waters to reinforce the fleet of revenue cutters. The fillibusters are reported to be having considerable difficulty in landing their supplies after reaching Cuba.

CALENDARS AND COUPONS.—We are hardly surprised to receive this season not only one of the very prettiest designs in calendars, but with it coupons which entitle the recipient to attractive novelties. Every one who gets a Hood's Sarsaparilla calendar for 1897 secures something that will prove interesting and valuable as well as a beautiful specimen of the lithographer's art. The calendar is accompanied this season by an amusing little book on "The Weather." Ask your druggist for Hood's Coupon Calendar, or send 6 cents in stamps for one to C. I. Hood & Co., Lowell, Mass.



## The Household.

CONDUCTED BY MRS. ELLA E. ROCKWOOD,  
FLINT, MICH.

We should be pleased to have any of our readers who take an interest in household topics, send in their views and opinions upon any subject which is under discussion, or which they wish discussed. This invitation is general, and we hope to see it accepted by many. Address all letters for THE HOUSEHOLD to Mrs. Ella E. Rockwood, Flint, Mich.

### A MODERN APOSTATE.

I do not like—I never did—this grand Electric Age;  
I'm sick of this unceasing war we all have got to wage;  
The endless schemes of robbery, the night that's turned to day,  
Till the last faint tinge of beauty and romance is swept away.

The happiest time in all my life was when I crept at night  
To my tick of rustling cornshucks by the moon's electric light;  
When I slept the dreamless slumber of a youth in rugged health,  
And my bedside was not haunted by the modern nightmare—Wealth.

I'd just a hundred dollars then—I have three millions now;  
But my food and drink don't taste to me one-half as good, I vow;  
And all my gold won't buy for me the jolly time I had

When I plowed the fertile upland as a red-cheeked country lad.  
How good it seemed at night to sit around the back log's flame!  
The shag log in my grand house can't warm my heart the same;  
Wine in my cut glasses, which has come across the sea

Will never fill the place of Dad's brown cider jug with me.  
Often of late I hear above the rattle of the cars  
The faint soft low of cattle, as they fret the pasture's bars;  
The leanto's roof is rustling with the first November rain,  
And the keen, sharp air of morning brings me back to life again.

I do not like—I never did—this grand Electric Age;  
I envy you, poor farmer lad, for all your scanty wage;  
I envy those wise men who live as God ordained they should,  
On the breast of Mother Nature, near the river and the wood.

—Austin Granville.

### HOME CHATS WITH FARMERS' WIVES.

#### BE CAREFUL OF FIRE.

Among my earliest recollections is the warning iterated and reiterated to be careful about fire. I can so plainly recall the occasions when the whole family were going away from home; when we children would be bundled in hoods, veils, and shawls for a long, cold ride, with the much despised woolen socks belonging to our father (and which were always of the finest homespun yarn, grey with white tops and toes, our mother's own work) drawn over our shoes to protect our feet from the cold, for this was before the day of arctics, my first pair of which I well remember. As we stood around the kitchen stove in our wraps waiting for father to drive to the door with the team, mother used to get the dipper from the water pail and carefully wet the floor all about the stove so that if during our absence any sparks or coals should get out they would be extinguished without doing any damage. Just how this could have happened since the stove had been closed tightly and no wood added for some time, I never could understand, yet we always felt safer, less fearful of fire, if this operation was gone through with.

When butchering day came, or the process of soap-making was in operation we girls were always made to don our woolen dresses as a precaution against catching fire in our eagerness to help and to watch the process from the closest possible point of view. Woolen, we were told, would not catch fire so easily as cotton, nor would it burn so readily if it should.

We were familiar with the story of how once upon a time, before my younger sister and I were born, the house caught fire and burned to the ground from somebody's carelessness with ashes. That somebody was neither father nor mother yet they lost nearly every bit of their furniture and clothing by means of it. I remember they used to tell how our older sister, then a little girl of eight or nine years, saved her dolly and its clothes from the burning building; how the silver spoons were found melted in a mass amid the ruins and that the jeweler took the lump of molten metal in payment toward others. That was when the country was new and there was no insurance. Of course it was many years ere things were replaced as before, and it was told to us children as a warning to ever be careful of fire. When the new house was built every stove pipe went into the chimney without passing through the floor, so great was the fear of that prevalent source for a fire to start—the place around the pipe in the ceiling.

Fires are of frequent occurrence in the winter season among dwellings. Hot fires, quickly started on a cold morning, the draughts all open carrying the flame half way to the chimney top, maybe; a tiny crevice, an imperfect flue, the chimney catches fire or in some way ignition of surrounding wood takes place, and—up in smoke goes the house. Any one who has

ever had a house burned down over their heads knows that it not a very pleasant experience aside from the loss entailed. This, while it may be covered by insurance, can never be fully estimated by one who has not passed through it. There are many things about a house which money cannot replace and no one wants to be burned out anyway.

Where pipes run through the ceiling great care should be taken to keep bedding, or anything which can take fire, from coming in contact with them. More than one conflagration has occurred from this very thing. The bed clothes have been flung over the foot of the bed in too close proximity to the heated pipe, or the careless throwing down of some garment which falls against the pipe, catches fire when no one is in the room, and a burned house is the result.

Too great care cannot be taken to instruct children about guarding against fire. Teach them to think about it and also teach them what to do in case of a fire. Tell them to remember if the clothing catches fire to lie down and roll over and over upon the floor to extinguish the flames rather than to rush wildly outdoors, thus increasing rather than diminishing the danger by causing a draft or current of air. Teach them that if any person's clothing takes fire the best and quickest way to put it out is to throw any heavy rug, blanket or shawl around them. That to smother a fire is much easier than to try to put it out in any other way when it is confined to a small space. Tell them also that the smoke is always less dense next the floor in a burning building, and that opening doors and windows only fans the flame by creating a draft of air. Of course it is to be expected that most people will lose their heads in case of a fire and do all sorts of unreasonable things such as carrying the feather beds safely out and throwing the mirrors out of the windows, but children should be instructed in such matters and when the emergency does occur they may be prepared for it.

The number of buildings burned by reason of children playing with matches would indicate a woeful lack of care on somebody's part. Parents are so often careless in this respect. They allow them to build bonfires and set fire to bits of paper without thinking that they may set fire to something more valuable some day. Children and matches are a dangerous combination, one not to be encouraged. Look out for this if there are little ones in your family. Do not trust the two together.

Lanterns are a necessity about the barns in winter when daylight lingers so late in the morning, but they should be carefully looked after and very carefully kept. A sputtering flame is always an indication of something wrong and should be considered a danger signal every time. Such a lantern should be thoroughly cleaned and if this and a new wick does not remedy the matter promptly, throw it away and buy a new one. At the present price one can scarcely afford to take the chances on a tricky one. Wires strung over head in horse and cow stables and hooks made of the same in shape of a letter S (with points well extended) hung to these furnish a safe way of lighting as far as a place to put the light is concerned. Hang the lantern on the hook and slide it along the wire as you need to change its position. Remember it was a lantern set in too close proximity to a cow that caused the great Chicago fire.

Fire is a good servant, but a very severe master. Let us take every precaution to keep our servant where it belongs. Look well at the stove which has recently been filled with wood to keep fire over night. Be sure the door is so securely fastened that should a stick fall against it, it could not get open. Be sure no sparks can fly out upon the carpet. Let everything be secure before retiring for the night, or before leaving the house alone for the day.

E. E. R.

### THE BENEFIT OF FARMERS' ORGANIZATIONS TO FARMERS AND THEIR WIVES.

The most of us believe, and sincerely hope, that farmers' organizations have come to stay. They are truly a blessing to the farmer and his wife. The Grange, which was organized 28 years ago, was the first farmers' organization, and, as Mrs. Mayo says, has proved to be the emancipation of woman. Here, at least, she has equal rights with her husband. Before these organizations were founded there was but little to break the monotony of farm life. An occasional trip to town, going to church, and making visits was about all. But now we have the Grange and Farmers' Clubs, where farmers and their wives can meet together, where, in discussing the different subjects that are taken up, they become better acquainted with each other, they grow less suspicious of each other, and in the interchange of ideas, their views become broader, while the conditions of the past have been to narrow rather than to broaden their views. The social features are also of great importance. Farmers' Clubs are becoming more numerous, and they are doing much in the way of educating and elevating the farmer. Then, last but not least, is the Farmers' Institute, which we enjoy so much, and we cannot but wonder at some of our farmer friends, who never yet have attended one. There is much to be learned, besides meeting with so many friends who come from far and near to attend the Institute. It is amusing to hear the remarks made about certain topics that are under discussion at the Institute. A lady of my acquaintance

said, after hearing a talk on butter making, that it would make no difference how much she heard on this question, she would not change her method; she had never allowed any water to touch her butter, and never would, for she knew that washing injured the quality. Then a farmer friend said that the professors who attended our Institutes every winter know nothing about farming, therefore should not attempt to tell "us old farmers" how to farm and so on. Our county Institute is well attended, both by farmers and townspeople, and we should try to induce our farmer friends who have never attended before to come out this winter, and if we cannot all express our ideas as we would like to, we can at least listen to those who can. Then all hail to the Grange, the Farmers' Club, and the Institute, or any organization that places within reach of the farmer and his wife the means of social enjoyment and intellectual improvement.

SANITAC CO.

L. N. H.

### LOOKING ON THE BRIGHT SIDE.

I, too, agree with A. H. J. that we should teach our children the habit of happiness. I think if we teach them to be cheerful and to look on the bright side of life, it will not only make them enjoy life better during their younger days, but will make it pleasanter for themselves and those who have the care of them when they arrive at old age. I have in mind two old ladies of our acquaintance who, when their husbands died, were left with comfortable homes, but alone as far as having any one to live with them, as their children were settled in homes of their own. Number one, as soon as the business of the estate could be settled, went to live with one of her sons, where she spent the remainder of her life cheerful and contented, loved and respected by all who knew her. Number two leased her farm for a term of years, but that not proving satisfactory, concluded to try married life again. Her husband being a very quiet sort of a person stood her fretting for a number of years, until patience ceased to be a virtue, when he bid her adieu to return no more. After this she tried living first with one child and then with another, but spending the most of her time among the neighbors, worrying for fear something would happen to her real estate, or her money would be taken out of the bank. Although she tried us all with her constant complaining, we could not help pitying her, for we believed it was a habit she had contracted in youth, (perhaps in early childhood) and had indulged in it until it had become second nature. I believe if people who are given to being despondent, would read Ella Wheeler Wilcox's poem, "Whatever is, is best" they would find it a great comfort to them. Let us each try and look on the bright side of life, and if there are any of us who think there isn't any bright side to our lives, let us try and polish up the dark side.

TWO OAKS.

ELLEN.

### RECIPES FOR CHAPPED HANDS AND FACES.

It is due every lady to care for her personal appearance, and, no matter what her environments may be, let her never retrograde into an indifferent, careless woman. A mother should set the example of being neat and tidy about home at her own table, and the daughters are apt to follow. No matter if you do have to wash your own dishes, or do your work, cooking. There are a great many ladies that are compelled to do so, but how gracefully they yield to circumstances, make the best of it, and are always neat in appearance and their hands nicely kept. In fact, the prettiest hands I can call to mind just now, are a young lady's who does all the work at home in a small family; she will not let her mother do it. She has mops to wash dishes, loose chamols gloves to sweep in, and at night uses a preparation that I will tell you of, and sleeps in loose kid gloves. Her recipe for whitening and softening her hands is as follows:

One-half ounce of glycerine, one-half ounce of elderflower water, eight ounces of benzoin, one-fourth ounce vaseline, one-fourth ounce powdered borax. Apply after washing. It will render the skin soft and fine. For keeping the skin from chapping and getting rough, you must use tepid water and the best and purest of soap, but to soften the hands or cleanse the nails properly, borax is the best in the tepid water. Some can't use soap, but have to substitute oatmeal, then dry thoroughly and apply vaseline or cold cream. For manicure treatment, when you wish to make the nails amenable to treatment, take a bowl of hot water, drop a few drops of benzoin into it, and immerse your hands to the knuckles and let them remain two minutes. I had my hands manicured quite often in New York, and on leaving there, supplied myself with all the preparations for caring for mine myself, and I have found that by washing my hands daily in tepid water with a little powdered borax in it, and then using a little lemon juice and glycerine and rose water at night, I can keep them beautifully. Of course, it takes practice to manicure your nails yourself, but you can do it. Cut the dead cuticle, trim the nails evenly, and polish them and keep them white and soft. If you have to do rough work, keep your gloves and protect your hands all you can. No matter how handsomely you dress, if your hands are all roughened and red and chapped, you will not feel good nor enjoy your lovely clothes at all. It detracts from your appearance, and it only takes a little more industry and pains to make them look

genteel. If you can't use glycerine (I know it makes some skin burns and look yellow), in that case use this recipe which is Sarah Bernhardt's recipe for keeping her hands soft and white.

Equal parts of lemon juice, borax water, vaseline, and the whole sweetened with triple extract of violet. There is no excuse for rough, red hands; you only need to take care of them and to study the best way. The Household page devoted to such things is the most helpful and useful to our girls, and they should avail themselves of it.

S. H.

### A HOUSE GOWN.

I have a new house gown that is so pretty, comfortable and becoming that I would like to describe it to the readers of the Household that they may go and do likewise. The material from which it is made consists of a pair of Cuban blankets (procured at any first-class dry goods house), the texture similar to that of outing cloth. The prevailing color is a deep tan with dashes of red all through it. Other combinations of color may be found if one prefers. The stripes, of which there are four, same as in all blankets, consist of several colors so skillfully blended as to give the effect of a rainbow. The cost was only 98 cents and the gown from which mine was patterned cost only 89 cents on "sale day," so you see the material has the recommendation of being inexpensive.

The garment is fashioned after the pattern of a Mother-Hubbard. In cutting, a little planning is necessary to make the four stripes fulfill the necessary demands. The blankets are folded together, the front breadths of the skirt part being cut first. The striped ends form the front edge of the gown (cutting the goods crosswise), thus having a stripe down each side of the front. These front breadths are cut to extend under the arms around nearly to the center of the back and go from top to bottom, so that the lower edge is at least half a yard wider than the upper—more if liked. The back breadth consists of a straight piece three-fourths of a yard wide at top and bottom with a stripe running the whole length down the center. Cut the yoke, back and fronts from the remaining stripe (crosswise) as also the lower part of sleeves and the turn-over collar. The upper part of sleeves are cut full bishop from the tan-colored goods. The yoke should be lined and the sleeves at the wearer's pleasure.

When the skirt breadths are sewed together, gather the fullness of fronts into space to fit the yoke and lay the back breadth into a wattleau plait with the stripe on the top of plait. A belt of goods or ribbon passes around the body under the gown to which it is caught at the waist line near the back on each side of the wattleau plait which is left unconfined. A girdle of heavy silk cord to correspond or harmonize with the prevailing color of the garment comes from underneath the plait and partially confines the front breadths to the figure, being loosely tied in front. The front edges are hemmed back in a manner showing two inches of the tan color at the yoke and six inches at the front so that the space inside the stripes is given a flaring effect toward the bottom. The fastening is made by means of hooks and silk loops. Large, handsome pearl buttons may be used down the front if desired.

N. E. C.

### A CRY OF WARNING.

"I suffered for years and years with womb and kidney trouble in their worst forms.

"I had terrible pains in my abdomen and back; could hardly drag myself around; had the 'blues' all the time, was cross to every one; but Lydia E. Pinkham's Vegetable Compound has entirely



cured me of all my pains.

"I cannot praise it enough, and cry aloud to all women that their suffering is unnecessary; go to your druggist and get a bottle that you may try it anyway. You owe this chance of recovery to yourself."—Mrs. J. STERNARD, 2318 Amber St., Kensington, Phila., Pa.

### MOTHERS

Your Children cured of Bed-wetting. Sample free. Dr. F. E. MAY, Bloomington, Ill.

The Detroit College of Commerce, SHORTLAND INSTITUTE and SCHOOL OF TELEGRAPHY. \$75 to Graduate in either Department. Write for College Journal to WM. E. CATON, Supt., 11 to 17 Bowland St., Detroit, Mich.

### GEARHART'S FAMILY KNITTER

Has an established reputation as a Rapid Seamless Knitter. Knits everything required in the household from homespun or factory wool or cotton yarns. A model of simplicity. A child can operate it. Price suited to times. Agents wanted. Yarns and supplies in stock. For particulars and sample work, address GEARHART KNITTING MACHINE CO., Clearfield, Pa.



## WHEN MOTHER ROCKS AND SINGS.

No sweeter song was ever sung,  
Or listened to by queens or kings,  
No richer music voiced or rung,  
Than mother's when she rocks and sings.

No dearer tones were ever heard,  
Or borne to earth on angel wings  
Than those low-breathed in tender word,  
When mother gently rocks and sings.

No rest more sweet than the repose,  
That sleep refreshing solace brings,  
When baby eyelids droop and close,  
While mother watches, rocks and sings.

When years increase, and eyes grow dim,  
Then almost forgotten things  
Fill fading memory to the brim,  
Where a dear mother rocks and sings.

How quick the pulses throb and swell,  
How clear from memory's belfry rings,  
The olden story sweet to tell,  
First told where mother rocks and sings.

Though from our homes we wander far,  
As life's time pendulum widely swings,  
We well may keep in sight the star,  
That shines where mother rocks and sings.

## SHORT STOPS.

PEGGY JANE, writes:—In reading of the Peculiarities of Men in the Dec. 12th Household, it brought to mind some of the trials which I have endured in the past. I have seen just such men that thought dinner was nearly ready if only the plates were on the table. But has any of the readers had any experience with a man that was always "somewhere else" at meal time? not one of the family, oh, no! they would have been educated long ago, but to have a man stay around until nearly dinner time, then go half a mile to work, returning just as the family are through eating or perhaps as the dishwasher is being thrown out. Now if there is anything that would spoil my good nature it is having meals at all hours; the idea of having a table sitting around waiting for some member of the family, as some do, is unnecessary. If any of the readers could suggest some way out of such a dilemma it would be welcome accepted I am sure, for there are those who have to put up with it.

A. H. J., writes:—I wish to extend a hand in welcome to our long absent Huldah Perkins. We are always glad to hear from her.

An excellent use to make of the old-fashioned Jersey jackets which many of us have is to make them up into mittens. With a well fitting pattern, rather small, a number of pairs of good mittens can be made from one garment. The pattern which has four pieces is best, as it will cut to better advantage. They can be trimmed to suit the fancy, but be sure to make them with good long wrists.

ALICE MAUDE, writes:—I am going to ask admittance to the Household long enough to tell its readers how to make a delicious sherbet out of newly fallen snow. Make a very rich lemonade, or just use lemon juice and sugar (plenty of the latter) and stir thick with snow. Canned pineapple used in same way makes very nice sherbet. A very good ice cream is made by sweetening and flavoring the cream, then stirring in snow the same as the sherbet. The snow must be light and fresh.

SAM'S WIFE, Howell, writes:—This morning I was reading that article of Huldah Perkins on the peculiarities of men. Well, I should say so! I think, Huldah, your husband must be some relation to mine. He will come home from town and tell me he saw some of my friends. I ask him what they had on and he says he thinks Carrie had on a new Garibaldi, and where on earth the man ever heard that word I'm sure I don't know. I afterward found out it was a Bolero jacket.

But a husband is a real handy thing to have around the house to look after the children and do odd jobs, although a good many of them are spoiled by humoring them and letting them know that you think too much of them. Knowing the "male sex" so well, as Samantha Allen says, "let 'em know you have hefty principles of your own to be maintained and also a mind to maintain 'em."

Why don't more of our farmers' wives write to the Household, I wonder?

MAY LESLIE, writes:—The offering to "Short Stops" from "Mother of Four" reminds me of one of the uses I make of old pants cloth. When used wrong side out it makes very good mittens for every day wear. A pattern is secured by spreading the hand down upon a piece of paper and drawing a pencil mark around the outside of the hand. Allow for generous seams. When the two sides are sewed together, insert a diamond-shaped gusset (three inches by one and one-half) between the thumb and forefinger thus giving plenty of room for expansion of the hand in picking up anything. Line these mittens with heavy Canton flannel. For men's working mittens I make the outside from a new grain bag and line with black pants cloth. Each side is made separate and then placed inside the other with seams turned together; then caught together at the wrists by turning in the edges and stitching in the machine. Indeed the whole work is done on the machine and will not consume more than twenty minutes. When the men wish to drive away from home and prefer dark mittens, they simply turn the bag side within, thus having a pair of black ones.

KATHARINE, writes:—An excellent remedy for cracks upon the hands, with which men are troubled during cold weather, consists

of hot shoemaker's wax run into the sore places. A bit of cotton cloth should be placed over it to prevent it from sticking to the clothing or bed clothes. To prevent these cracks, use a mixture of equal parts kerosene oil and mutton tallow applied to the hands morning and noon. Tar soap is excellent for farmers' use, also oatmeal soap. The latter may be made by melting, with a little water, castile or other pure soap and stirring in oatmeal till thick. When cold cut in bars. Scraps of soap may be used in this way.

## The Poultry Yard.

For the Michigan Farmer.

## THE FARMER'S POULTRY HOUSE.

Wherever it is practicable it is best to allow the poultry free range. Very often other considerations come into the case which may render the free range idea partially or wholly impracticable; when such is the case the enclosure should be as roomy and spacious as circumstances will permit. It is only when a fowl has unlimited range that it attains its greatest degree of health. Freedom for the fowl is often not only a matter of health, but in many cases a matter of economy. On a well arranged farm, where the poultry is isolated from the garden, by far the better way for the average farmer's flock is to give it liberty. Besides being far less care, a fowl will easily pick up ninety per cent of its living during at least seven months of the year.

But when fowls are given "free range" it doesn't necessarily mean that they are to shift for themselves during twelve months of the year. No well-to-do farmer will allow his farm stock to run at random, and at the same time expect to get any returns; he is very well aware that proper stables and pens are not only quite necessary but absolutely required if he wishes to attain any sort of success. The same is none the less true of poultry. No matter how free and admirably situated the range, they should have set apart for their own exclusive use some suitable building; without such it is doubtful if even the faintest resemblance to success can be acquired. A farmer cannot afford to lose the droppings, which is necessarily the case if the fowls are allowed to seek the tree tops for a winter's roost; there is no better manure in the world, and none more easy to save if the right course is adopted. A wide-awake farmer cannot afford to search in all conceivable places for eggs, perhaps to find them after they have been spoiled, or possibly never to find them at all. For these and similar reasons that will readily suggest themselves, it is far better that the farmer's flock should have a suitable building, either set apart or erected for their own exclusive use, not only as a matter of convenience but also from an economical point of view.

A good, practical poultry house does not, of necessity, need to be an expensive one. On the contrary we have seen some rather homely affairs possessing more really good practical points of utility than others built on a more elaborate scale. A house twelve by twelve will provide plenty of space for twenty-five fowls. Such a house may be constructed with a shed roof; four feet in the rear and seven in front will provide ample room, although, if it is made of sufficient height to allow an average man to stand erect, it will doubtless prove quite as acceptable. The inside of such a house can be arranged very readily to suit one's own whims. What will suit one won't suit another. When it comes to the roosts the keeper must make up his own mind how he desires them to be arranged. Some prefer the roosts to be horizontal, i. e., all on a level; others think there is nothing like the slanting roost or the ladder-like arrangement. Some poultry keepers use a platform to catch the droppings, while others consider the platform arrangement to be nothing short of a useless contrivance. Some writers advocate the idea of putting the roosting poles on a framework erected at an angle of about forty-five degrees. Directly beneath this they put a platform on the same slant as the roosts; the idea is that the droppings will collect themselves in some sort of a receptacle arranged at the edge of the slanting platform. Such a plan might work all right in theory, but there might be grave reasons advanced why it wouldn't work in practice. The writer has never personally tested the plan.

The scratching pen is another feature about which the prospective poultryman must be his own judge. Some seriously question the practicability of such an apartment set aside for that purpose, while others assert that the scratching pen is as indispensable as the roosts.

There is another thing which is often ignored but which should always be taken

into consideration, viz., what breed are you going to keep? The whole entire arrangement may depend on the solution to this question. A house designed for one breed may not be suitable for another. For instance, the writer has a house built expressly for the Leghorn; in such a house a Brahma or a Cochon would be as much out of place as a cow in a sheep pen. A house may be so constructed as to meet the wants for any breed; but the writer's preference would be one that is built with a certain point in view. Such buildings in the end generally prove the more satisfactory.

There is another thing that must be taken into consideration in constructing a poultry house—ventilation. The builder may make the other arrangements to suit himself, but when it comes to provide a ventilator it will be well to have a care how a person puts his whims into practice. There are more "ventilators" that prove to be death traps than anything else. The idea that a successful henhouse must be so arranged that the interior will have a "free air circulation" is all humbug. There are more fowls killed by too much "fresh air" than by the want of it.

If a person must have a ventilator, then by all means contrive to dispense with draught as far as possible, or serious consequences will be the result. A ventilator is not a necessary fixture to a henhouse. It only seems necessary in houses that are over-crowded and ill-kept. Use judgment in housing your stock and never fear but what they'll get air enough.

C. P. REYNOLDS.

## VIGOR IN MOULTING.

A bulletin of the Department of Agriculture says: There is perhaps no time in the history of the fowl that indicates its vigor so well as the moulting period. Fowls that molt in a short time and hardly stop laying during this period, as a rule, have strong vigorous constitutions, and if properly fed they will give a large yearly record. On the other hand, those that are a long time moulting have not the vigor and strength to digest and assimilate food enough to produce the requisite number of eggs. It is necessary to select fowls some time during the year other than the moulting period. Some indication of their egg-producing power is shown in their general conformation. In selecting a hen for egg-producing her form will give some information of value. A long, deep-bodied fowl is to be chosen rather than one with a short body, whose underline is not unlike a half circle. A strong, hearty, vigorous fowl usually has a long body, a deep chest, with long and quite straight underline. Other things being equal, the larger-bodied fowls of the egg breeds are to be preferred. It is a rule that fowls bred for egg-production are larger-bodied than those bred for fancy points. Whenever vigor and constitution form an important part in the selection of fowls for breeding the size of the fowls is invariably increased.

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## Legal Department.

CONDUCTED BY EARL D. BABST,  
56 Moffat Building, Detroit.

164—Brighton, Mich.:—Cannot advise without knowing provisions of lease.

**PROPERTY IN BEES.**—G. C. B., Tekonsha, Mich.:—Has a man a right to mark a bee tree on my farm and forbid me to cut it down?—An unreclaimed swarm of bees, like all other wild animals, belongs to the first occupant. In other words, to the person who first hives them, but if a swarm fly from the hive of an owner, his qualified property continues so long as he can keep them in sight and possesses the power to pursue them. If owner has followed bees from hive to tree, his qualified property continues, but to get complete ownership he must have them, otherwise the bees belong to the owner of the land where the tree stands. Merely marking a bee tree does not reclaim the bees, and there would be no remedy against owner of tree should he cut it down and take honey and bees.

**TIME WITHIN WHICH MORTGAGE MUST BE FORECLOSED—CHILDREN INHERIT EQUALLY.**—A. A. H., Mecosta Co., Mich.:—1. B. sells a piece of land to A. and takes back a purchase-price mortgage. A. sells said land to C. before B.'s deed to A. is recorded. A. paid the mortgage held by B. and has receipt for same, but does not know whether said mortgage was discharged. This mortgage was given in 1868. B.'s deed to A. is now recorded, but it was not put on record until after death of B. Have heirs of B. any claim on this property?—No. Mortgage even if not paid is barred by limitation. Mortgages due before 1879 are barred by failure to commence proceeding thereon within 20 years, and mortgages due since 1879 by elapse of 15 years. Petition Circuit Court for discharge, if there is no record, under Act 32 of Public Acts of 1893. 2. If a son disclaims to his mother, does he share equally with other children in this property after her death?—Yes, unless there is a will making a different provision.

**OBSTRUCTION OF HIGHWAY—PAY FOR PAPER TAKEN FROM POSTOFFICE—READER, Odessa, Mich.:—1.** Has any person a right to lay poles outside of the main track in a road to prevent people from driving outside? If not, are they liable for damages caused by such obstructions?—The "travelled part of the road" means that part which is wrought for travelling and is not confined simply to the most travelled wheel track, but the owner of the soil is not punishable for a nuisance in using any part of it in such a way as not to interfere with the public convenience. The owner of premises adjoining a highway, however, has no business to fill up any portion of it with stones, wood-piles, brush heaps or any refuse matter from his premises. He may use portions of the highway outside the traveled for the temporary storage of materials with which to build fences or walls; but even in such cases care must be taken to guard against damage. A person can recover damages caused by negligent obstructions in the highway. 2. Can a person be made to pay for a paper that was sent to him after his time had expired? When was such a law passed?—How, in case the subscriber was deceased?—A person can be made to pay for a paper sent to him after his subscription has expired if he continues to receive it from the carrier or take it away from the postoffice. Death of subscriber terminates the contract and his estate would be liable for subscription up to time of his death.

**ADVERSE POSSESSION.—PARTITION FENCE—OVERHANGING TREES—TREES IN HIGHWAY.**—READER, Mayville, Mich.:—1. A. buys land of B., and in improving the same has built and maintained the entire line fence for 30 years between himself and B. for the purpose of enclosing his own fields, B.'s land being woodland. Ten years ago B. joined his fence to A.'s. Can this circumstance alone give B. title to any land lying between A. and B., and outside of A.'s fence, which is not on the true boundary line? How shall the true line be established and B. forced to build his part of the fence?—If B. did not join his fence to yours until ten years ago he has only held adverse possession for ten years. It is not necessary in order to entitle anyone to claim title by adverse possession that the premises should be inclosed by a fence, but the possession must be actual, continual, visible, notorious and hostile, and it is evident that such possession has not existed on the part of B. for more than ten years anyway. As fifteen years adverse possession is necessary in Michigan to establish title, A.'s remedy lies in ejectment. Have the line surveyed and request B. to construct his share of the fence. If he refuses, complain to two or more fence viewers. They will make an examination and assign to B. the share of the fence which he is to erect and allow him a certain time for erecting the same. If he refuses or neglects to erect his share of the fence within the specified time, A. may erect the whole fence. If A. erects the fence and it is adjudged sufficient by two or more fence viewers, and the value of the fence, together with their fees, has been ascertained by a certificate under their hands, A. will have a right to demand the share due him by B. If B. refuses or neglects to pay such sum on or before the first day of the succeeding October, the sum so due will become a lien on B.'s land, and the fence viewers should report the same to the supervisor of the township on or before the first day of the next succeeding November

who will spread same on the assessment roll opposite the description of the land. This tax shall be collected in the same manner that other taxes are collected, and paid over to A. upon the order of the township board. 2. Can B. allow his trees and undergrowth to overhang A.'s land?—Branches overhanging the land of another are considered a nuisance and A. may trim such overhanging branches off up to a point even with the dividing line between the land of A. and B. 3. Can B. allow his timber to cross the highway to the damage of the public?—Trees now growing sixty feet apart and as much as twenty-three feet from the center of the highway shall not be injured or removed except by direction of the highway commissioner and with the consent of the owner of the adjoining land. If the trees obstruct the highway, apply to the highway commissioner of your district.

## The Markets.

### WHEAT.

The market is a little lower than it was a week ago, after advancing to 94½¢ for No. 1 white and No. 2 red. The fluctuations are simply the result of speculators selling or buying, and cannot be regarded as normal changes. Practically the market is in the same shape as ten days ago, with perhaps a firmer undertone, and in time this will make itself felt if no unforeseen circumstances arise. The export demand seems to be increasing, an unusual thing at this season.

The following table exhibits the daily closing sales of spot wheat in this market from December 10 to January 7 inclusive:

	No. 1 White.	No. 2 Red.	No. 3 Red.
Dec. 10.....	90	90	84
" 11.....	90½	90½	84½
" 12.....	91½	91½	85½
" 13.....	92½	92	87
" 14.....	91½	91½	85½
" 15.....	90½	90½	84½
" 16.....	90½	90½	84½
" 17.....	89½	90	84
" 18.....	89½	90½	84½
" 19.....	90	90	84
" 20.....	90½	90½	85½
" 21.....	91½	91½	87
" 22.....	92	92½	88
" 23.....	92½	92½	88
" 24.....	92½	92½	88
" 25.....	92½	92½	88
" 26.....	92½	92½	88
" 27.....	92½	92½	88
" 28.....	92½	92½	88
" 29.....	92½	92½	88
" 30.....	92½	92½	88
" 31.....	92½	92½	88
Jan. 1.....	94½	94½	90½
" 2.....	94½	94½	90½
" 3.....	94½	94½	90½
" 4.....	94½	94½	90½
" 5.....	94½	94½	90½
" 6.....	94½	94½	90½
" 7.....	94½	94½	90½

The following is a record of the closing prices on the various deals in futures each day during the past week:

	May.
Thursday.....	96
Friday.....	97
Saturday.....	97½
Monday.....	96½
Tuesday.....	96
Wednesday.....	94
Thursday.....	94½

The visible supply of wheat on Saturday last, as compiled by the N. Y. Produce Exchange, was 54,651,000 bu., a decrease of 208,000 bu. over the amount reported the previous week.

The English visible supply increased 5,291,000 bu. last week. A Baltimore dispatch dated December 31 says: "The year closed with a continued blockade and rush in the grain trade at this port. The crush is so great that a number of steamships that could not get alongside the piers or elevators loaded from floating elevators at piers where large vessels have not moored for years. Six steamships are in the bay bound for Baltimore to load grain for foreign ports. Fifteen vessels are now loading." The Modern Miller says: "The demand for winter wheat is not as strong as last week, but grain is as firmly held as ever. Light holiday trade accounts for the lessened demand. The flour trade has been very good for the season. In the south an unusually brisk holiday trade is reported; stocks in that section are low. Nashville reports the heaviest export sales of flour for months. The Pacific coast did only a fair business; prices are firmly held. A general report shows the wheat crop damage to have been magnified."

The Sydney Herald, of Melbourne, Australia, estimates that the six Australian colonies will require about 5,000,000 bu. in addition to the wheat already purchased by them. Following is from the Sidney (Australia), Herald of December 19: "Total wheat crop of six Australian colonies, 18,643,000 bu.; quantity required for food and seed, 25,706,000 bu.; showing deficit of 7,063,000 bu.; foreign wheat already afloat and purchased for shipment, 2,324,000 bu. This shows a shortage of 4,739,000 bu. yet to be purchased."

The Thoman crop report for January estimates the total stocks of wheat in this country in all positions at 266,000,000 bu. He estimates the home requirement, bread and seed, at 166,000,000 bu., leaving 100,000,000 bu. for export for six months, and for domestic reserves in positions July 1, 1898. He estimates that with exports during the next six months as large as for the same six months last year, 64,000,000 bu., there will be left on July 1 in all positions in this country only 36,000,000 bu., compared with over 106,000,000 bu. on July 1 last year. He makes the January condition of the growing winter wheat 95.4, against 97.6 in December and 82.6 January 1, 1896, and declares the condition on the Pacific coast perfect.

World's exports for last week were 5,291,000 bu.; decrease on passage, 2,640,000 bu.

Stocks of wheat at San Francisco call board ports January 1 were 2,863,100 bu., against 3,707,100 bu. December 1 and 5,720,900 bu. January 1, 1898.

Stocks in Liverpool January 1 were 59,000 sacks of flour, 2,606,000 bu. of wheat and 1,112,000 bu. of corn. A year ago they were 56,000 sacks of flour, 4,520,000 bu. of wheat, 1,144,000 bu. of corn. During December stocks of wheat increased 784,000 bu.

The Stettin (Germany) Corn Exchange has decided to suspend business as a protest against the new law prohibiting dealing in futures. The Berlin Produce Exchange has followed the example of the Stettin Corn Exchange in deciding to suspend business as a protest against the law devised to prevent dealing in futures.

### DAIRY PRODUCTS.

#### BUTTER.

The receipts of butter have been in advance of the demand for several weeks, and stocks on hand are large enough to weaken values. Other markets appear to be in the same condition as our own, and the prospects are for a quiet and rather weak market for some time. Quotations in market

range as follows: State creamery, 100¢; Elgin 21¢; dairy, choice, 14¢; fair to good 12¢. In Chicago the trade is very quiet, with values showing a decline since a week ago. Receipts especially of the medium and lower grades, are heavy while the demand from all sources is light. Quotations in that market on Thursday were as follows: Creameries—Extras, 19¢; firsts, 17¢; seconds, 14¢. Dairies—Fancy, 17¢; firsts, 14¢; seconds, 12¢; imitation creameries, firsts, 13¢; ordinary makes, 10¢; packing stock, fresh, 8¢; roll butter, choice 9¢; off stock 8¢. The New York market shows the usual holiday dullness, with a decline in values, and rather poor prospects for any immediate improvement. Receipts are ample, and are reported to be increasing, especially from the west. Under these influences trade is dull, and buyers very conservative. The lower prices on good stock may lead to more export business in that grade. Quotations in that market on Thursday were as follows:

EASTERN STOCK.	
Eastern creamery, fancy.....	19 @
Eastern creamery, choice.....	17 @18
State dairy, h. f. tubs, fancy.....	15½ @16
State dairy, h. f. tubs, choice.....	14 @15
State dairy, h. f. tubs, fair to good.....	12 @13

WESTERN STOCK.	
Elgin creamery, fancy.....	20 @
Creamery, Western, fancy.....	20 @
Creamery, Western, choice.....	18 @19
Creamery, Western, fair to good.....	13 @17
Dairy, Western, firsts.....	12 @13
" thirds to seconds.....	8 @10
Western imitation creamery, choice.....	15 @16
Western imitation creamery, fair to good.....	11 @14
Factory, fresh, choice.....	13 @14
Factory, fresh, fair to good.....	7 @12
Rolls, fresh.....	9 @14

#### CHEESE.

There is nothing new to report about cheese so far as this market is concerned. Values are unchanged, quotations still ranging from 9½¢ to 10¢ for the choicest full cream State, with no prospect of any immediate change. At Chicago there is nothing new in the market since a week ago except some demand from exporters for choice cheddars. Values hold steady, but the volume of business is light. Quotations in that market on Thursday were as follows: Full cream—Young Americas, 8¢; twins, 7¢; brick, full cream, new, 7¢; cheddars, 9¢; Swiss, fair to choice, 8½¢; Limburger, good to choice, 7½¢. The New York market is fairly active and steady in a general way, with prospects of some improvement as the result of conditions surrounding the market. The N. Y. Tribune says of the outlook: "Now that the new year is fairly opened and estimates of the visible stocks of cheese at all points have been made confirming the reports of much lighter supplies than at this time last year the position is certainly a very strong one with the outlook very encouraging, and prospects are favorable to a gradual hardening in price. While there is hardly actual basis to warrant quotations above 10¢ for fancy September, either large or small sizes, still many holders are indifferent about offering such grades below 11¢, and we hear of occasional sales of small lots from store at that price. Exporters have been actively searching for under-priced cheese from 10¢ down, and such grades are in such narrow compass that actual business has been restricted in consequence." Quotations in that market on Thursday were as follows:

New State, full cream, large, white, fancy	10 @10½
September.....	10 @10½
Do do late made, prime.....	9½ @9½
Do do good to choice.....	9½ @9½
Do do colored, fancy.....	10 @10½
Do do do late made, prime.....	10 @10½
Do do do choice.....	9½ @9½
Do do do fair to good.....	7½ @8½
Do do small, fancy, white.....	10 @10½
Do do colored, fancy.....	10 @10½
Do do good to choice.....	10 @10½
Do do common to fair.....	7½ @9
Light skims, choice, small size.....	9 @9½
Do do large.....	9 @9½
Do do common to prime.....	4 @8
Full skims.....	2½ @

At Liverpool on Thursday quotations on finest American cheese were 5½ pwt for choicest September makes, both white and colored. These are the same figures as quoted a week ago.

### DETROIT PRODUCE MARKET.

DETROIT, Jan. 7, 1897.

**FLOUR.**—Quotations on jobbers' lots in barrels are as follows:  
Straights..... \$4 75 @  
Clears..... 4 50 @  
Patent Michigan..... 5 00 @  
Rye..... 3 00 @  
Low grade..... 4 00 @

**CORN.**—No. 2, 22½¢; No. 3, 22¢; No. 2 yellow, 23½¢; No. 3 yellow, 23¢. The visible supply of corn on Saturday last was 19,352,000 bu., an increase of 959,000 bu. from the previous week.

**OATS.**—New, quoted as follows: No. 2 white, 19½¢; light mixed, 18½¢; No. 3 white, 17½¢. The visible supply of oats on Saturday last was 14,089,000 bu., an increase of 613,000 bu. since the previous Saturday.

**BARLEY.**—Quoted at 62¢ to 70¢ per 100 lbs. The visible supply on Saturday last was 4,483,000 bu., a decrease of 472,000 bu. since the previous Saturday. Last sales were at 65¢.

**RYE.**—Quoted at 35¢ per bushel for No. 2. No. 3 sells at 34½¢. The visible supply of rye on Saturday last was 3,087,000 bu., an increase of 91,000 bu., since the previous Saturday.

**CLOVERSEED.**—Prime spot, 55¢ per bu.; No. 2 quoted at 44¢ to 45¢. At Toledo prime is quoted at 52½¢ for December delivery, with a dull market.

**FEED.**—Bran, \$10; coarse middlings, \$10; fine middlings, \$12 00; corn and oat chop, 85¢; cracked corn, 80¢; coarse cornmeal, 80¢. These prices are for car load lots; small lots are \$1 per ton higher.

**BUTTER.**—Market quiet. Quoted at 13¢ to 14¢ for best dairy; fair grades, 10¢ to 12¢; creamery, 19¢ to 20¢. CHEESE.—New Michigan full cream, 9½¢ to 10¢.

**EGGS.**—Market firm at 15¢ for storage, and 16¢ for candled. Strictly fresh selling at 17¢.

**ONIONS.**—Michigan, 40¢ to 50¢ per bu.; home-grown Spanish, \$1 35 per crate.

**POTATOES.**—Quoted at 20¢ to 25¢ per bu. At Chicago quotations on Thursday were as follows: Early Rose, 20¢ to 22¢; Hebrons, 18¢ to 20¢; Burbanks, 20¢ to 22¢ per bu.

**BEANS.**—Quoted at 70¢ per bu. for hand picked in car lots; unpicked, 40¢ to 50¢ per bu. At New York quotations on Thursday were as follows: Marrow No. 1, \$1 15; medium, \$1 05; pea, 50¢; white kidney, \$1 50 to 1 55; red kidney, choice, \$1 40 to 1 45; do yellow eye, \$1 20. Market dull and declining.

**APPLES.**—Quoted at 75¢ to 80¢ per barrel for common; good winter, \$1 01 to 1 25; fancy, \$2 25 to 2 50 per bbl. Market very dull owing to poor quality of receipts.

**CRANBERRIES.**—Cape Cod quoted at 55¢ to 60¢ per bbl.

**GRAPES.**—Catawba, 11¢ to 12¢ per 5-lb basket. DRIED APPLES.—Sun-dried, 2½¢ to 3¢; evaporated, 4½¢ to 5¢ per lb.

**HONEY.**—Quoted at 12¢ to 14¢ in sections, for new; extracted, 5¢ to 6¢ per lb. At Chicago it is quoted as follows: White clover, 1-lb sections fancy, 10¢ to 12¢, broken combs, 9¢ to 10¢; amber to dark comb, 7¢; extracted, 6¢ to 7¢ per lb.

**BEEHIVES.**—Prime, 23¢ to 24¢ per lb. HEDGES.—Green, No. 1, 5¢; No. 2, 4½¢; cured, No. 1, 6¢; No. 2, 5¢; calf No. 1, green, 8¢; cured, No. 1, 8¢; No. 2, green, 6½¢; No. 2, cured calf, 6½¢.

**POULTRY.**—Dressed chickens, 90¢ to 95¢; dressed

turkeys, 10¢ to 12¢; dressed ducks, 9¢ to 10¢; geese, 9¢. Live—Turkeys, 9¢ to 10¢; ducks, 8¢ to 9¢; chickens, 6¢ to 7¢ per lb.

Quotations at Chicago are: Dressed—Turkeys, 10¢ to 11¢; chickens, old and young hens, 6½¢; spring chickens, 7¢ to 8¢; roosters, old, 4¢ to 4½¢; ducks, 8¢ to 10¢; geese, 7¢ to 10¢ per lb. GAME.—Wild ducks—Redheads, 60¢ to 75¢; blue bills, 25¢ to 30¢; mallards, 60¢ to 70¢; canvasbacks, \$1 150; butter-balls, 20¢ to 25¢ per pair.

DRESSED VEAL.—Quoted at 62¢ to 70¢ for ordinary to good carcasses, and 74¢ for fancy. DRESSED HOGS.—Quoted at 55¢ to 75¢ per cwt with \$4 00 paid for fancy.

PROVISIONS.—Quotations are as follows: Mess pork..... \$8 00 @ Short mess..... 9 50 Short clear..... 8 50 Lard in tierces, 5 lb, compound..... 4½ Pure lard, 5 lb..... 5½ Hams, 5 lb..... 9½ @10¼ Shoulders, 5 lb..... 5½ Choice bacon, 5 lb..... 7¼ Extra mess beef, new 5 bbl..... 6 75 Plate beef..... 7 25 Tallow, 5 lb..... 3½

OILS.—Raw linseed, 33¢; boiled linseed, 35¢ per gal. less 1¢ for cash in 10 days; extra lard oil, 42¢; No. 1 lard oil, 33¢; water white kerosene 34¢; fancy grade kerosene, 9½¢ to 10½¢; deodorized gasoline, 8½¢ per gal.; turpentine, 34¢ per gal., in barrel lots, less 1¢ for cash in 10 days. Less quantities, 30¢ per bbl.

HARDWARE.—Axes, single bit, bronze, \$5 50; double bit, bronze, \$6; single bit, solid steel, \$5 50; double bit, solid steel, \$10 50 per doz; bar iron, \$1 50 rates; carriage bolts, 70 per cent off list; tire bolts, 70 per cent off list; painted barbed wire, \$1 60; galvanized barbed wire, \$2 00 per cwt; single and double strength glass, 70 and 100 per cent off list; No. 24 sheet iron, \$2 50 rates per cwt; galvanized, 75 and 5 per cent off list; No. 1 annealed wire, \$1 45 rates. Wire nails, \$1 70; steel cut nails, \$1 65 per cwt, new card.

COFFEE.—City prices are: Rio, roasting, 15¢; fair, 20¢; good, 21¢; prime, 22¢; choice, 24¢; fancy, 25¢; Maracaibo, roasted, 25¢; Santos, roasted, 24¢; Mocha, roasted, 31¢; Java, 32¢ to 33¢.

### BALED HAY MARKET.

#### DETROIT.

Timothy, No. 1.....	Per ton.
do No. 2.....	\$9 00 @ 9 25
Rye straw.....	8 00 @ 8 25
Wheat straw.....	5 75 @ 6 00
Oat straw.....	4 50

#### LOOSE HAY.

The following is a report of the sales of loose hay at the Western Hay Scales for the week ending noon, January 7, with the price per ton on each load:

Saturday—8 loads: Five at \$8; two at \$4.50; one at \$4.

Monday—7 loads: One each at \$12, \$10, \$9, \$8.50, \$7, \$6.50 and \$5.

Tuesday—17 loads: Two at \$9; four at \$8; two at \$7; two at \$6; two at \$5; one each at \$12, \$10, \$8.50, \$8, \$7.50 and \$7.

Wednesday—14 loads: Four at \$9; three at \$8; two at \$7; one each at \$12, \$7.50, \$6.50, \$6 and \$5.50.

Thursday—8 loads: Five at \$8; one each at \$12, \$9.50 and \$7.50.

#### CHICAGO.

The market for hay shows some slight changes. Offerings are ample to meet all requirements. Quotations on Thursday were as follows:

Timothy, choice.....	\$8 50 @ 9 50
" No. 1.....	8 00 @ 8 50
" No. 2.....	7 00 @ 7 50
Mixed.....	5 00 @ 6 00
Prairie hay.....	5 00 @ 6 00

#### NEW YORK.

The market shows some improvement, especially on the best timothy, since a week ago, the result of lighter receipts. Prices below are on large bales, small bales are \$1 per ton lower. Quotations in that market on Thursday were as follows:

Prime timothy, large bales.....	\$15 00 @ 16 00
No. 1 timothy.....	14 00 @ 15 00
No. 2.....	13 00 @ 13 50
No. 3.....	11 00
Clover.....	11 00 @ 12 00
Clover, mixed.....	19 00 @ 20 00
Straw—Long rye, best.....	18 00 @ 19 00
Tangled rye.....	10 00 @ 13 00
Short rye.....	10 00 @ 13 00
Oat.....	7 50 @ 8 00

#### PHILADELPHIA.

Choice timothy is in light supply and firm, while other grades are rather dull at a decline. Straw is also lower. Quotations on Thursday were as follows:

Timothy, choice, large bales.....	\$14 00 @ 14 50
" small bales.....	13 25 @ 13 50
" No. 1.....	12 50 @ 13 00
" No. 2.....	11 00 @ 11 50
No. 1 clover, mixed.....	11 00 @ 11 50
No. 2 clover, mixed.....	10 00 @ 10 50
Straw—rye, No. 1, straight new.....	15 00 @ 15 50
" No. 2, rye.....	15 00 @ 15 50
" Tangled rye.....	9 00 @ 9 50

### DETROIT LIVE STOCK MARKET.

#### Michigan Central Stock Yards.

#### DETROIT, Mich., Jan. 8, 1897.

#### CATTLE.

The receipts of cattle for the week numbered 485 head of which 116 were from the west consigned through and direct to butchers. The quality on sale was not very good, being mostly cows and common to fair mixed butchers. No good shipping steers on sale. Market active and strong for good handy butchers, common unchanged. \$4 was the highest price paid for 5 good butchers steers at 1,040 lbs, but the bulk changed hands at prices ranging from \$2 50 to \$3 50; bulls, good shippers, \$2 65 to \$3; light and butchers, \$2 35 to \$3; stockers, \$2 50 to \$3; feeders, \$2 35 to \$3. Not many here. Veal calves, receipts were 68



Carman sold same 11 do av 824 at \$3.80, and 2 cows av 1,225 at \$2.40.  
 Pakes sold same 17 mixed av 756 at \$3, and one ox weighing 1,000 at \$3.10.  
 Ansty sold Mason 8 mixed butchers av 858 at \$3.25.  
 Joe McMullen sold Mich Beef Co 7 cows av 1,051 at \$2.50, and 30 good mixed butchers av 847 at \$3.30, also 2 oxen to Sullivan av 1,640 at \$3.15.  
 Roe & Holmes sold Robinson 5 cows av 1,000 at \$2.60; 5 good steers av 1,040 at \$4; 3 mixed av 1,073 at \$2.75; 2 do av 895 at \$3; 4 do av 875 at \$2.50; 11 av 825 at \$2; to June 3 bulls av 770 at \$2.50, and 5 oxen to Sullivan av 1,630 at \$3.  
 Haley sold Schleicher 11 fair mixed butchers av 679 at \$2.85.  
 Henry sold Sullivan 2 coarse oxen av 1,850 at \$2.65.  
 Spioer & M sold Caplis & Cross 11 mixed butchers av 790 at \$3.15; a cow weighing 1,170 at \$2.40; 1 do weighing 840 at \$2.70, and a canner weighing 800 at \$2.  
 Dennis sold Mich Beef Co a fat cow weighing 1,280 at \$3; 2 common do av 1,000 at \$2.25, and 10 steers and heifers av 797 at \$3.50.  
 Roe & Holmes sold Kamman 18 mixed butchers av 715 at \$2.75.  
 T Breenahan sold Magee 6 common butchers cows av 1,003 at \$2.35.  
 Rhodes sold Fitzpatrick 3 cows av 890 at \$2.75, and 16 good mixed butchers av 836 at \$3.10.  
 Bergen sold Magee 4 cows av 990 at \$2.50; 3 fat heifers to Mich Beef Co av 923 at \$3.75, and 3 do cows av 1,120 at \$3.  
 Ackley sold Loosemore 5 mixed butchers av 990 at \$2.40, and a cow weighing 1,000 at \$2.25.  
 Fox & Bishop sold Loosemore 30 mixed butchers av 1,017 at \$2.90; to Sullivan a bull weighing 1,400 at \$2.60, and 1 do weighing 900 at \$2.  
 Robb sold Caplis & Cross a bull weighing 830 at \$2.25, and 6 fat cows av 1,006 at \$3.50.  
 Mayer sold same 2 mixed av 930 at \$2.75, and 5 fat cows av 1,004 at \$3.  
 Winslow sold same 7 cows av 1,061 at \$2.55.  
 Harwood sold Cook & Fry 19 steers and heifers av 735 at \$3.55, and a cow weighing 1,000 at \$2.50; to Caplis & Cross 2 steers av 1,235 at \$2.90, and a fat ox to Sullivan weighing 1,790 at \$3.10.  
 Corrigan sold Sullivan 5 mixed feeders and stockers av 712 at \$3, and a fat bull weighing 1,350 at \$2.90.  
 Pline sold Sullivan 3 stockers av 600 at \$3, and 2 heifers to Reagan av 583 at \$2.75.  
 Thompson sold Caplis & Cross 2 cows av 1,050 at \$2.60, and 18 steers and heifers av 805 at \$2.55.  
 York sold same a bull weighing 800 at \$2.50; 2 heifers av 695 at \$3.25, and 3 fair butchers cows av 1,175 at \$2.75, also 4 feeders to Sullivan av 740 at \$2.25.  
 Sly sold Kamman 5 fat cows av 1,006 at \$2.60, and 2 common do av 985 at \$2.25.  
 Moore sold Sullivan 2 cows av 1,200 at \$2.75.  
 Roberts & Spencer sold Fitzpatrick 3 fat cows av 1,010 at \$3; 6 do av 1,000 at \$2.40, and a canner weighing 1,050 at \$2.10.  
 McLaughly sold Marx 2 cows av 860 at \$2.50.  
 Roe & Holmes sold Schleicher 8 mixed butchers av 985 at \$2.85; 5 do to Robinson av 960 at \$2.75, and a fat bull weighing 1,120 at \$3.  
 Smith sold Loosemore a cow weighing 1,050 at \$2.65, and 3 fat do av 1,080 at \$3.  
 Wilson sold Caplis & Cross 10 common butchers cows av 1,038 at \$2.10, and 10 steers and heifers to Sullivan av 723 at \$3.30.  
 Eddy & Lowrey sold Robinson 10 steers and heifers av 788 at \$3.50.  
 Stabler sold Sullivan 2 fat bulls av 1,050 at \$3.  
 Howe sold Reagan 5 mixed av 720 at \$2.60.  
 Roe & Holmes sold Mich Beef Co 8 steers and heifers av 967 at \$3.50.  
 McWhitney sold Reagan 3 cows av 903 at \$2.50, and 8 mixed av 831 at \$2.40.  
 McLaren sold Sullivan 4 cows av 1,010 at \$2.50.  
 Jedele sold Mich Beef Co 8 mixed butchers av 1,055 at \$3.

## SHEEP AND LAMBS.

Sheep and lambs—Receipts 1,335, quality fair. Market active and strong at last week's prices. Range for good lambs \$4.50 to \$5.15; light to good, \$3.50 to \$4.40; good to choice mixed lots, \$3.50 to \$4.50; fair to good butchers, \$3.50 to \$3.80; common, \$2.40. All sold early; closing firm. There were 1,058 sheep and lambs on sale Friday. Market opened slow and 20 to 25c lower for lambs. Good handy mixed butchers about steady. Closing weak with several loads shipped through in first hands.  
 Lee sold Mich Beef Co 202 mixed butchers av 79 at \$3.05.  
 Wadley sold Monahan 44 do av 69 at \$2.80.  
 Cushman sold Sutton 116 mixed av 73 at \$3.25.  
 Lovewell sold Loosemore 63 mixed av 83 at \$3.  
 Talman sold Ward 201 lambs av 78 at \$3.  
 Carman sold Hiser 48 lambs av 66 at \$4.  
 Dennis sold Sutton 97 mixed av 85 at \$3.40.  
 Lewis sold Fitzpatrick 112 mixed av 84 at \$3.55.  
 Spioer & Merritt sold Ward 82 lambs av 73 at \$5.05, and 76 av 72 at \$4.80.  
 Taggart sold Monahan 90 mixed butchers av 74 at \$3.35.  
 Purdy sold Phillips 124 sheep and lambs av 71 at \$3.65.  
 Roe & Holmes sold same 36 fat butchers av 107 at \$3.25.  
 A. A. Bray sold Sutton 49 lambs av 76 at \$4.60.  
 Roe & Holmes sold Ward 25 lambs av 57 at \$4.75, and 51 feeders av 95 at \$3.25.  
 Sutton sold Loosemore 30 mixed av 63 at \$3.  
 Roe & Holmes sold Ward 35 feeders av 111 at \$3.25, and 77 lambs av 73 at \$5.  
 Pline sold Sutton 27 lambs av 70 at \$4.80.  
 Sutton sold Ward 111 feeders av 84 at \$3.50.  
 Lomason sold same 62 lambs av 66 at \$4.25.  
 Robb sold Mich Beef Co 43 lambs av 68 at \$4.50, and 32 fat butchers av 102 at \$3.  
 Waukenbush sold Monahan 94 sheep and lambs av 73 at \$3.50.  
 Sutton sold Stabler 90 lambs av 73 at \$4.75.  
 Howe sold Phillips 29 lambs av 76 at \$4.70.  
 Richmond sold Young 64 lambs av 77 at \$4.75.  
 Roe & Holmes sold Robinson 25 lambs av 75 at \$4.75.  
 Buck Bros. sold McIntyre 30 lambs av 70 at \$4.80.  
 Vickers sold Caplis & Cross 11 mixed av 79 at \$3.50.

## HOGS.

The receipts of hogs numbered 2,312 head, all from Michigan, of good average mixed quality. Market opened active and 5 to 10c higher than prices paid one week ago, but was rather weak at the close. Range of prices \$3.25 to \$3.45. Bulk at \$3.35 to \$3.40. Stags 1/2 off. Rough heavy 2/3 to \$3.20. Friday's receipts of hogs numbered 2,391 head. Market opened slow and weak, later was active at prices 2 1/2 to 5c below above quotations. All sold closing firm.  
 McQueen sold Hammond S. & Co 97 av 224 lbs at \$3.40.  
 McHugh sold same 54 av 179 at \$3.40 and 60 av 239 at \$3.40.  
 Dennis sold same 10 av 441 at \$3.10 and 45 av 271 at \$3.40.  
 Ansty sold Parker, Webb & Co 46 av 191 at \$3.40.  
 Robb sold same 44 av 185 at \$3.40.  
 Haley sold same 15 av 192 at \$3.40.  
 Astley sold same 119 av 223 at \$3.35.  
 Roe & Holmes sold same 132 av 231 at \$3.40 and 117 av 243 at \$3.40.  
 Pline sold same 100 av 238 at \$3.40.  
 Hogan sold same 40 av 250 at \$3.37.  
 Spioer & M sold same 42 av 173 at \$3.40 and 76 av 222 at \$3.40.  
 Lomason sold same 30 av 236 at \$3.35.  
 Knapp sold same 40 av 181 at \$3.40.  
 Joe McMullen sold same 43 av 193 at \$3.40.  
 Sheldon sold same 115 av 249 at \$3.35.  
 Corrigan sold same 27 av 214 at \$3.35.  
 Rhodes sold R S Webb 12 av 186 at \$3.45.  
 Clark & B sold Farnham 23 av 184 at \$3.40.  
 Dennis sold Hammond S & Co 55 av 216 at \$3.40.  
 Thompson sold same 49 av 179 at \$3.40.

Bergen sold same 30 av 242 at \$3.35.  
 Carman sold same 43 av 176 at \$3.42.  
 Mayer sold same 30 av 250 at \$3.40.  
 Bullen sold same 30 av 210 at \$3.40.  
 Ackley sold same 58 av 226 at \$3.40.  
 Coates sold same 45 av 230 at \$3.40, and 61 av 157 at \$3.40.  
 Lewis sold R S Webb 72 av 199 at \$3.45.  
 Bunnell sold same 68 av 225 at \$3.45.  
 Taggart sold same 60 av 230 at \$3.45.  
 Brophy sold same 62 av 190 at \$3.43.  
 Lovewell sold same 24 av 209 at \$3.40.  
 J. Smith sold Hammond S. & Co 56 av 188 at \$3.40.  
 Sly sold same 30 av 236 at \$3.35.  
 Hertler sold same 61 av 229 at \$3.35.  
 Stephens sold same 101 av 217 at \$3.35.  
 Sutton sold same 63 av 238 at \$3.30.  
 Horner & B sold same 55 av 273 at \$3.30.  
 McMullen sold same 56 av 232 at \$3.40.  
 Kring sold same 53 av 201 at \$3.35.  
 Stabler sold same 27 av 243 at \$3.35.  
 Wilson sold same 88 av 260 at \$3.32.  
 Eddy & L sold same 45 av 254 at \$3.35 and 21 av 278 at \$3.35.  
 McMullen sold same 82 av 244 at \$3.30.  
 Laduke sold same 59 av 214 at \$3.35.  
 Handfield sold same 143 av 236 at \$3.32, and 108 av 247 at \$3.32.  
 Spioer & Merritt sold Parker, Webb & Co 43 av 214 at \$3.35.  
 Jedele sold same 22 av 248 at \$3.30.  
 Richmond sold same 35 av 179 at \$3.40.  
 Parsons & H. sold same 119 av 212 at \$3.40.  
 Vickory sold same 23 av 259 at \$3.35.  
 Roberts & Spencer sold same 71 av 246 at \$3.35.  
 Smith sold same 61 av 241 at \$3.35.  
 Horner & Brown sold same 44 av 240 at \$3.35.  
 Judson sold same 49 av 178 at \$3.35.  
 Howe sold same 33 av 198 at \$3.40.  
 Lucke sold same 113 av 250 at \$3.35.  
 White sold same 70 av 234 at \$3.35.  
 Hauser sold same 71 av 267 at \$3.35, and 31 av 268 at \$3.35.  
 McWhitney sold same 52 av 164 at \$3.40.

## OUR BUFFALO LETTER.

EAST BUFFALO, Jan. 7, 1897.

CATTLE.—Receipts of cattle on Monday last were 4,002, as compared with 3,058 for the same day the previous week; and shipments were 2,860, as compared with 2,222 for the same day the previous week. The cattle market has ruled steady all week, with the bulk of the various grades selling at last week's prices. Stock cattle have advanced, and rule firm under an active demand. Bulls, oxen, cows and heifers are unchanged. Choice steers and well finished butchers' cattle are firm. Prospects for the coming week regarded as fair. Quotations at close of business on Wednesday were as follows: Export and shipping steers.—Prime to extra choice steers, 1,450 to 1,600 lbs., \$4.90 to \$5.00; do., 1,300 to 1,400 lbs., \$4.75 to \$4.90; good to choice fat steers, 1,450 to 1,600 lbs., \$4.65 to \$4.85; good choice fat steers, 1,300 to 1,400 lbs., \$4.50 to \$4.65; good to choice fat smooth steers, 1,100 to 1,300 lbs., \$4.30 to \$4.50; coarse and rough fat steers, 1,100 to 1,450 lbs., \$3.75 to \$4.25. Butchers' native cattle.—Fat smooth dry fed steers, 1,050 to 1,150 lbs., \$4.25 to \$4.40; fat smooth dry fed light steers, 900 to 1,000 lbs., \$4.00 to \$4.20; green steers, thin to half fattened, 1,000 to 1,400 lbs., \$3.65 to \$4.00; fair to good steers, 900 to 1,000 lbs., \$3.75 to \$4.00; choice smooth fat heifers, \$3.90 to \$4.15; fair to good fat heifers, \$3.40 to \$3.85; light, thin half fat heifers, \$3.75 to \$3.95; fair to good mixed butchers' st.-ck, fat and smooth, \$3.40 to \$3.85; mixed lots, fair quality fat cows and heifers, \$3.50 to \$3.65; good smooth well fattened butchers' cows, \$3.10 to \$3.50; fair to good butchers' cows, \$3.40 to \$3.85; common old cows, \$3.00 to \$3.25. Stockers, feeders, bulls and oxen.—Feeding steers, good style and quality, \$3.00 to \$3.85; fair to good weight stockers, 650 to 750 lbs., \$3.25 to \$3.50; light, thin and only fair stock steers, \$3.65 to \$4.00; fair to good steers, 900 to 1,000 lbs., \$3.75 to \$4.00; export weight bulls, fat and smooth, \$3.50 to \$3.75; good fat smooth butchers' bulls, \$3.85 to \$3.95; fair to good sausage bulls, \$3.50 to \$3.75; thin old and common bulls, \$3.25 to \$3.50; stock bulls, \$3.25 to \$3.50; fat smooth young oxen, to fit for exports, \$3.75 to \$4.00; fair to fairly good partly fattened young oxen, \$3.25 to \$3.75; old, common and poor oxen, \$2.00 to \$3.00. Veal calves.—Common to fair, \$4.50 to \$5.00; good to choice, \$5.00 to \$6.00; prime to extra, \$5.25 to \$6.00. Milch cows.—Strictly fancy, \$3.00 to \$4.00; good to choice, \$3.00 to \$3.40; poor to fair, \$1.40 to \$2.00; fancy springers, \$3.00 to \$4.00; fair to good, \$1.80 to \$2.50; common milkers and springers, \$1.40 to \$2.00. Thursday but little was done, and values were unchanged.

SHEEP AND LAMBS.—Receipts Monday were 10,800 as compared with 27,900 the previous Monday; shipments were 7,800 as compared with 14,200 same day the previous week. The market for sheep has ruled firm and active all week owing to light arrivals and sellers were enabled to advance prices materially. On Wednesday, however, values began to decline before the close, and it is likely prices will recede from the extreme range on both sheep and lambs which have been general since Monday. Quotations at the close on Wednesday were as follows: Native sheep.—Selected handy weight wethers, \$4.00 to \$4.25; mixed sheep, choice to prime, \$3.40 to \$3.90; do., fair to good, \$3.15 to \$3.50; do., common to fair, \$2.75 to \$3.00; cull sheep, common to good, \$2.00 to \$2.65; clipped heavy export sheep, mixed ewes and wethers, \$3.75 to \$4.00; selected prime export wethers, \$4.00 to \$4.25; bucks fair to good, \$1.75 to \$2.50. Native lambs.—Extra to prime selected, \$5.25 to \$6.00; good to choice, \$4.85 to \$5.25; common to fair, \$4.50 to \$5.00; culls, common to good, \$3.75 to \$4.25. Thursday the market was dull and lower; best lambs sold at \$5.00 to \$5.25; fair to good \$4.65 to \$5.00; culls and common, \$3.50 to \$4.50; mixed sheep, good to choice, \$3.50 to \$3.75; common to fair, \$3.25 to \$4.00; export western Modoc wethers, \$4; export ewes, \$3.40 to \$3.60.

HOGS.—Receipts of hogs on Monday last were 19,520, as compared with 28,000 for the same day the previous week; and shipments were 14,400 as compared with 15,840 for the same day the previous week. The market has ruled strong this week under light arrivals; but on Wednesday, receipts having increased, there was a me weakness shown at the close. It is not unlikely that values may drop before the close of the week under heavier receipts. Quotations at close on Wednesday were as follows: Good to choice 185 down to 160 lbs., \$3.85 to \$3.90; good to choice pigs and light Yorkers, 125 to 150 lbs., \$3.90; mixed packing grades, 175 to 200 lbs., \$3.65 to \$3.70; fair to best medium weights, 210 to 280 lbs., \$3.60; good to prime heavy hogs of 270 to 300 lbs., quotable, \$3.60. Rough, common to good, \$3.25 to \$3.30; stags; rough to good, \$2.75 to \$3.00; pigs light, 100 to 120 lbs., good to prime corn fed lots, \$3.90 to \$4.00; pigs, common, thin skippy to fair quality, \$3.50 to \$3.80. Thursday the market was dull and lower; Yorkers sold at \$3.70; light and mixed pigs, \$3.75; mixed packers, \$3.55 to \$3.60; heavy and medium, \$3.55; roughs, \$3.20 to \$3.10; stags, \$2.25 to \$2.50.

## CHICAGO.

UNION STOCK YARDS, Jan. 7, 1897.

CATTLE.—The receipts for last week were 46,390 against 35,432 for the previous week, and 40,334 for the corresponding week in 1896. Up to and including Wednesday of this week the receipts have been 39,341, as compared with 33,021 for the same days last week. While the receipts this week are a little short of last, the quality of the stock has not been as good, the result of which has been the lowering

prices on certain grades of mediums and half-fat steers; also, the poorer grades of butchers' stock, especially common cows, canners, and other rough kinds. Sales showing that anything carrying weight or flesh, either for the export or domestic trade, sold about 10 to 15c better than the close of last week. Sales were made at \$3.60 to \$4 for the poorest native dressed beef steers, \$4.10 to \$4.50 for medium to good, \$4.60 to \$5 for good to choice, and \$5.10 to \$5.25 for choice to prime, with fancy cattle scarce and worth \$5.30 to \$6.40. The stocker and feeder trade was lively at \$3.40 to \$4.10, with prime 1,100-lb feeders wanted at \$4.25, the highest price reached in a long period. Butchers' and canners' cattle were active, cows and heifers selling at \$1.80 to \$4, with a few fancy heifers at \$4.10 to \$4.25. Stags and oxen sold at \$2.50 to \$4.20 and bulls brought \$3.10 to \$3.80, while good to prime calves were in good demand at \$5.50 to \$6.05. Thursday the market was steady and unchanged for the best cattle, but weaker for poor stuff; receipts were 13,000.

SHEEP AND LAMBS.—Receipts for the past week were 53,449 as compared with 44,135 the previous week and 50,135 for the corresponding week in 1896. Up to and including Wednesday of this week receipts have been 30,448, as compared with 34,030 for the same days last week. On Wednesday business was active with prices showing little or no change since the beginning of the week, but 15c to 30c higher on both sheep and lambs, as compared with last week. Prime sheep, either natives or westerns, \$3.50 to \$3.75; others, \$3.25 to \$3.50; yearlings, \$4.40 to \$4.70. Top lambs sold at \$5.25 to \$5.50; fair to good, \$4.75 to \$5.00; and common, \$3.25 to \$3.75. There was a consignment of Mexican yearlings on the market, for which the salesman was asking \$4.75, with a \$4.50 bid. Thursday receipts were 17,000; market 10c lower; native, \$3.50 to \$3.75; western, \$3.30 to \$3.60; lambs, \$3.50 to \$3.75.

HOGS.—The receipts for last week were 129,055 against 142,896 for the previous week, and 151,136 for the same week in 1896. Up to and including Wednesday of this week receipts have been 67,147 hogs, as compared with 80,360 for the same days last week. On Wednesday, prices ruled rather irregular, and in many instances values showed a decline of 5c as compared with the opening of the week, but higher than on Friday of last week. Light hogs closed firm, while medium and heavy were easy. Rough and common heavy, \$3.15 to \$3.20; prime heavy packers and good mediums, \$3.25 to \$3.40; prime mediums and butcher weights, \$3.40 to \$3.60; prime light, \$3.45 to \$3.55. On Thursday receipts were 30,000; market 6c lower than yesterday morning; light, \$3.30 to \$3.50; rough packing, \$3.20 to \$3.40; mixed and butchers, \$3.25 to \$3.40; heavy packing and spring, \$3.15 to \$3.42; pigs, \$3.20 to \$3.50.

The Scientific American endorses the plan proposed to divide the year into 13 months after Jan. 1, 1900, the first 12 months to consist of 28 days and the other of 29—30 in leap years. Everywhere, as in this proposal, the tendency is to simplify details.

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## Horticultural.

For the Michigan Farmer.

### THE NEW FRUIT GROWER.

The new fruit grower will be quite a different personage from the old one; his orchard and berry fields will be quite different from those now in existence. Instead of the spasmodic crops now produced, one very heavy crop and then very light or no crops for several years they will annually bring large crops and luscious fruits which shall more than double present consumption among the people. He will bear in mind that the quickest way to find new markets is to increase quality so that each person shall eat two berries instead of one and thus have the market reserved for himself.

The new fruit grower will be a live, up-to-date man and understand the life habits and requirements of his plants and will discuss their merits and demerits as individuals with as much intelligence and enthusiasm as any prize-taking cattle breeder or chicken fancier.

He will understand that when a plant or tree produces fruit it is breeding or multiplying its species and its fruit develops as a means of growing the seeds (eggs) and that this development will be in proportion to the stamina or potency of its pollen and vigor of pistils. He will understand that breeding in plants is the most exhaustive process and will, if left without restriction, bring on impotency and inability to fruit, and while he will encourage fruitage all he possibly can, he will at the same time, by judicious pruning and thinning at the proper season, prevent them from approaching the danger line. He will recognize that a plant is a living creature, having the same life principle as an animal and as capable of appreciating and responding to generous treatment and congenial surroundings.

He will not trouble himself about glutted markets and competition but will rise above them. He will prefer to spend a day's extra work in growing a superior article to sell at sight at a large price, rather than spend two days on the market selling a poor article at a low price. He will understand that it is hard to "learn old dogs new tricks," that the average grower will not abandon the ruts of his ancestors and adopt modern methods so as to become a competitor. The new fruit grower will be something of a soldier. He will drill himself until he can do his work without false motions—every lick will count in the right place at the right time and thus secure the right results. He will be intensely interested in his work and enjoy it, and learn to look for the bright side of everything, keeping himself in a serene and happy mood with a clear intellect so he can detect every good thing coming his way.

He will cultivate good and systematic habits and business methods and keep his business before the public so that people will call upon him to supply their wants in his line and be able to approach a customer in a courteous business way.

Of course he will be a subscriber to horticultural journals and always be present and take an active part in societies organized to further the interests of his calling.

St. Joseph Co.

R. M. KELLOGG.

For the Michigan Farmer.

### STRAWBERRY CULTURE.

The strawberry, "the queen" of berries, is grown in almost all, if not in every state of the Union, and seems to succeed under more diversified conditions of soil and climate than any other berry. No matter how high or low the land, how rich or poor the soil, the strawberry takes hold and makes the best of conditions wherever placed. Yet we do not believe that it pays to impose on good nature, for there is no crop that responds more liberally to good treatment and high culture than the strawberry.

While the strawberry is largely grown for commercial purposes all over our country, it is surprising how many of our well-to-do farmers have not supplied themselves with enough to meet the wants of their own families, and this when the plants can be had so cheaply and grown so easily.

I will say to those who have been careless about this matter if they will humble their pride a little by laying aside as much money for strawberry plants as they do for onion sets every spring, and spend half the time in their care, they can supply the family with enough of the choicest berries to please their palates for a season of at least four weeks.

SOIL.—As I said above, they can be grown on almost any soil. The best, however, is a clayey loam or clay subsoil well drained. The ground should be prepared the year before by planting to some hoed crop, allowing no weeds to go to seed, as weeds and grass are their greatest enemies. The ground should be well fertilized either with barnyard manure or commercial fertilizer. The former should be plowed under in the fall or winter and the latter applied in the spring before planting.

WHEN TO PLANT.—The best time is in April or May, or as early in the spring as the ground can be worked. The ground should be marked out in rows three and a half feet apart and plants set fifteen to eighteen inches apart in the rows, making

about five or six thousand plants to the acre.

The blossoms are of two kinds, bisexual, or perfect, and pistillate, or imperfect. The latter have no pollen and will not bear when planted alone, but when planted near some perfect sort, are the most productive. Hence there should be no prejudice against them. Plant two rows of a perfect and four or five rows of an imperfect variety alternately throughout the field. Care should be taken to select varieties that bloom and ripen as nearly together as possible.

WHAT VARIETIES SHALL WE PLANT?—This is a question that has been debated for a long time. In some sections there are more Crescents grown than all other varieties combined. When compared with the wild berries of the field, or even such varieties as Jennie Lind or Downer's Prolific and others that our forefathers grew, they are a grand and noble berry indeed. But we are living in a progressive age, and there is no branch of the fruit industry that has made more rapid progress than the strawberry. And to-day when the old reliable Crescent is compared with such varieties as Greenville, Haverland, Sharpless, Wolverton, Bubach, Gandy, Marshall, Brandywine and a few others, they are small, soft and sour. The only thing left to recommend them is their wonderful productiveness. If you are determined to grow them for productiveness alone, do not grow them in a careless, haphazard way, but give them good care, not allowing the vines to become too thickly matted over the ground; keep the plants thinned, and with a liberal supply of manure or fertilizer you will be able to get the best the variety will produce.

Our markets are already oversupplied with small, inferior berries, and during the heat of the season, after the expenses of picking, packing, express, commission, etc., are taken out, there is but little left for the grower. Would it not be better to look more to size and quality and not so much to quantity? In these days of low prices, to realize a fair profit the horticulturist should endeavor to produce the very best of everything he grows, and not only the best varieties, but the best specimens of that variety.

CULTIVATION.—The cultivation should begin early in the spring before the weeds start and be kept up until August, allowing no weeds or grass to grow. A cultivator is convenient for doing the work and as the plants send out runners, narrow the cultivator, giving the plants room to spread. A light covering of straw or other coarse material on young beds at the beginning of winter serves as a protection to the plants and will also keep the berries clean during the bearing season.

The horticulturist has a broad and inviting field spread out before him, offering pleasure and profit as the fruits of his toils and cares. Many are afraid that the business will soon be overdone, and there will be no sale for the fruit. Get the best varieties that are to be had and with good cultivation you will have a berry that will always be welcomed on the table at home and elsewhere.

A. R. HARDING.

GALLIA COUNTY, Ohio.

For the Michigan Farmer.

### ANSWER TO MR. ROBERTS' QUERY.

In your issue of Dec. 26th, Mr. E. A. Roberts, of Kent County, asks the writer if he made a mistake in picking off the blossoms from his one-year-old cherry orchard of English Morellos and Early Richmonds.

I think he did just what he ought so far as the Morellos are concerned, as the object of course is to promote growth. I find the Richmond makes plenty of growth, and at the same time matures what fruit sets. As to the Duchess Dwarf pears, they bear well in some parts of the State. J. N. Stearns, of South Haven, has a very productive orchard of this sort, and Mr. Roberts on his soil may have as good results. I shall replace every fourth tree in my Dwarf orchard with other sorts (standards), such as are as free from blight as possible, for the double purpose of fertilizing the Dwarfs and making an orchard after the Dwarfs have failed from age or other causes.

MUSKOGON COUNTY.

J. J. GEE.

For the Michigan Farmer.

### A SHARP KNIFE.

"One reason why women generally make such poor florists," said an old gardener to me, "is because they are afraid to use a sharp knife. The geraniums they have in their windows are leggy, awkward-looking things that rarely bloom, whereas if they were shortened there would be many flower stems. And look at those roses," said he, pointing to my few bushes with long, straggling ends, "you probably had a dozen buds on them when you ought to have had fifty. This is the way," and he took out a murderous looking pruning knife and slashed away until there was nothing but a few stems a foot high. He saw in my face the expression, "You've killed them now," and added, "If these don't bear well next year, I'll give you some more." And my roses were the delight of the neighborhood the next summer. Vines are particularly desirous of having their own way, and sometimes you must cut and slash them without mercy. The new variegated hop vine is pretty if you can keep it in its place on a fence or trellis, but their one desire is to squeeze the life out of the plant that stands next. I have had some choice rose plants ruined in this way, and now I pull up and cut away all that attempt to leave their rightful place. Vines have their likes and dislikes, and are persistent in getting their own way. On my piazza was a wood-

bine that I wanted to twine around a pillar. Next was a vine screen placed for a prairie rose to climb on, but the woodbine quickly covered it. I spent an hour pulling it out of the meshes and twining around the pillar, only to find it, a few days after, in complete possession of the screen, and my poor little rose lost to view. I untwined it again and fastened it to its own place with a stout string, but every few days it sent out feelers for that screen, and these I cut off. A sharpened table knife will do pretty well, but a regular pruning knife is better. Instead of having bric-a-brac for a Christmas present that you don't care for, and that can be put to no earthly use, I hope it will be a knife you can use in your garden work.

ANNA LYMAN.

### CHANGING VARIETIES BY GRAFTING.

This subject is being generally discussed by orchardists in the older States, and this week we give the views of P. C. Reynolds, a veteran fruit culturist of Western New York, which he contributes to the *N. Y. Tribune*. The suggestions of Mr. Reynolds, and the methods recommended are of much practical value to owners of old orchards, and deserve their attention. There are many old orchards in Michigan whose future usefulness depends upon their being renewed, and the varieties changed to meet present market demands for certain popular sorts. Falling in this, these orchards are simply useless, and will never return any profits to their owners. They are generally neglected, and become the source from which insect pests of every description are generated, to the loss and disgust of other and more careful orchardists in the neighborhood. Mr. Reynolds says:

It is not good economy to grow poor varieties of any species of fruit, or any sort of the best. Few farmers or fruit-growers, however, when their orchards or fruit gardens come into bearing are perfectly satisfied with the products of every tree, whether destined for market or family use. The first may be inferior in quality, unattractive in appearance, or, if satisfactory in these features, may be such shy, unreliable bearers as to be altogether unprofitable. A tree producing inferior fruit occupies just as much land, consumes as much plant food, requires as much cultivation, pruning, etc., as one bearing the most attractive, the most delicious, the most salable fruit. A man may have planted an orchard with selected varieties of the different fruits obtained at a reliable nursery, may have fertilized, cultivated, pruned, possibly sprayed the trees until they have commenced bearing, when he finds that some of the trees are not what he supposed he was purchasing, not true to name, bear inferior fruit. This is quite a common experience. The most careful and conscientious nurserymen sometimes make mistakes. Now the fruit grower does not want to devote his land, his fertilizers, his labor to such trees. Shall he dig them up and plant others in their places? Not by any means. If he will go to work in the right way he can have just the fruit he wants growing upon those trees in three or four years. Let him procure scions from bearing trees that he knows to be what he wants and graft into those condemned trees, and he will soon find that he has an orchard or fruit garden every tree of which is producing the fruit he wishes to grow. Or a man purchases a farm with a bearing orchard and fruit garden, and when the trees fruit he finds that some of them bear fruit that he does not want to grow. He does not want to dig up those trees and plant others in their places, nor does he wish to continue to produce undesirable, unprofitable fruit. But he can in a few years change the varieties of fruit they produce, even if they are large trees. I have sometimes thought that if I were going to plant another apple orchard (I have planted several) I would purchase all the trees of some good, vigorous straight-growing variety, like the Northern Spy, and when they made two or three years' growth would graft from bearing trees all that I wished to change. They would make a more thrifty, attractive orchard, and one that would come into bearing earlier than if left to bear without grafting.

The better way of changing varieties of apples and pears is by grafting. Cherries and plums may be changed by either grafting or budding—preferably the latter—and peaches are much more easily changed by budding. Grafting is generally done in the spring, as early as the weather will permit convenient working. Cherries and plums should be grafted early—in the month of March, if possible. Apples and pears may be grafted any time in April, as soon as it is warm enough for the wax to spread readily. I have grafted them after the buds had expanded considerably, but would greatly prefer to do it earlier. Scions should be cut in autumn, after the leaves have fallen, in the latter part of winter, or early in the spring while the buds are still dormant. They should be buried in sand or may be kept in the cellar in slightly dampened moss or sawdust. I have cut them from trees while grafting, but would prefer to cut them earlier, when the buds are entirely dormant. They should be cut from the ends of the limbs from the previous year's growth, and from healthy, vigorous trees. Only part of the last year's growth should be taken. Enough should be left to continue growth and form spurs and fruit buds for the next year's fruit. Two or three buds are generally left upon a single graft (although one may answer), and the scion should be cut from one to one and a half inches below the lower bud. Cleft grafting is most generally practiced

on trees over an inch in diameter, or on the branches of older trees. The tree or branch is sawed off with a fine, sharp saw, the stump split with a grafting chisel or a broad carpenter's chisel, and a wedge of hard wood or iron driven into the cleft to keep it open for the insertion of the graft. The graft is cut with a keen-bladed knife, wedge shape, from the lower bud down, the wedge being left a little thicker on the side of the bud, so that the bark of the stock shall press the bark of the graft. The graft is then inserted into the cleft so that the inner bark of the graft shall come in contact with the inner bark of the stock, that the sap may circulate between the two. The lower bud of the graft should come on the outside of the stock and just above the junction of graft and stock. Any handy young man may soon become an expert grafter.

In preparing the tree for the reception of the grafts, if it were young, with a trunk but an inch or little more in diameter, I would prefer cutting off the trunk five or six feet from the ground and would insert two scions. If larger would graft the branches. In grafting a new top on an old tree, I would select the more vigorous branches for grafting, sawing off the lower branches some distance from the trunk to give a spreading top, and would saw off the central branches as low down as possible without cutting off large limbs, so that the new top should not be at the end and above the old one, but should take its place, so far as practicable. Still, I would rather have the new top some distance from the ground than to cut off large limbs, thereby endangering the life of the tree. When the grafts are set, a grafting wax, made of three pounds of rosin, two pounds of beeswax and one pound of tallow, or one pint of raw linseed oil, should be spread all over the end of the stump, over the cleft bark and around the grafts, so as to exclude air and water. The ingredients of the wax should be melted, mixed and poured into a tub of cold water and before the composition has hardened it should be thoroughly worked—pulled as they pull molasses candy—until it becomes quite light colored and pliable. The whiter it is the less liable will it be to melt and run off under the heat of the summer's sun. If sprouts start around the stub they should be rubbed off, and if the grafts all live they may need thinning considerably the next spring to prevent too dense a top. When an old tree is grafted it is a good plan to begin grafting it in the centre of the top, taking two or three years to entirely change the tree. I am aware that this story has been many times told, but every year brings new learners.

### THE CULTIVATED ORCHARD.

"To cultivate or not to cultivate" our apple orchards? that has been the question which I have heard discussed at our fruit growers' meetings as long as I remember having attended them. If it can ever be settled for good, it seems that the past season (1896) should have done it. Never before have I seen the good results of good cultivation so markedly and strikingly displayed as was done in all the orchards around here and elsewhere this year. Every orchard that had been well treated in previous years bore a full crop, and the richer the land and the more thorough the cultivation, the larger the yield and the finer the individual apples. We had splendid fruit even on trees in sod where the latter was of recent making, or the soil fertility reasonably well kept up. The failures were found only in orchards, that have had no attention—no manure, no plowing—for years. Sod and neglect may not prevent blooming and fruit setting, nor always the development of some sort of a crop, but the past season's experiences seem to give conclusive evidence that the proper development of the fruit, and the approach to a degree of perfection, which it reaches, are dependent on the chances we give to the trees. The home grower, with his comparatively few trees, will always be on the safe side if he keeps them well manured, and the ground well tilled. He wants fruit every year, if possible, and the only way to make it possible is by the course suggested.

For young trees thorough tillage is even of greater importance than manuring. We

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are cautioned that if we are too liberal with organic manures, we may force rapid wood growth at the expense of fruit. Yet there is no need of being too easily scared. What we want of the tree is to make wood growth first, and lots of it. We cannot have fruit without wood, so we first aim to get a good supply of that and the fruit will come at the proper age of the tree. Of course we are not in favor of making unreasonably excessive applications.

One of the striking differences in the behavior of trees, in more or less tilled soil and those in old sod, was the premature dropping of the leaves on the latter. The neglected orchards stood leafless for a number of weeks while cultivated orchards remained yet in healthy, dark-colored foliage. Evidently the food supply had given out early and the apples, instead of swelling out to full size, ripened up with the leaves before their natural time and dropped to the ground, while the fruit on well-fed trees still kept a firm hold on the branches. In consequence of this early dropping a large share of the fruit in these neglected orchards has gone to waste, or had to be gathered and sold as "seconds" or windfalls.

This same difference, due to cultivation and the lack of it, was also observable in pears, especially in the Bartlett, which here is the main variety grown. The pears on trees that had been well treated were of good size, notwithstanding the enormous crop, and of the natural (green) color when harvested. The trees in sod gave us pears of a peculiar yellowish color often marked with minute dots or specks, and occasionally of rather angular or irregular shape. These trees also shed their leaves many days before the cultivated ones did.

That pears, especially the Bartlett, are very impatient of neglect is now becoming to be quite generally recognized by the average grower in this vicinity. Bartlett pears have been a profitable crop here for years, and even in this year of low prices have yielded a big revenue to the producer. Two canning establishments near and in Rochester bought up about 6,000 bushels in this little town at 1½¢ a pound, for firsts and seconds, delivered at the station here in bulk. I received \$250 for my crop. The old orchard contains about a half acre. The young orchard (an acre or more) had as yet but little fruit. A neighbor sold his crop (two acres) for about \$1,200; another (same area) for about \$1,600. The orchards which gave these phenomenal yields have been heavily manured year after year with old yard manure, and kept under the best of tillage, being plowed every spring, harrowed numerous times during the summer, and plowed again before winter. The splendid results—namely, yearly and profitable crops—have set the other pear growers to thinking, and now a neglected Bartlett orchard hereabouts is the exception where it used to be the rule. As long as we grow these heavy yields of pears, we need not be afraid of applying any kind of manure, even the nitrogenous stable manure, too freely. The more manure, the more and better pears—that is our experience.—T. Greiner, in *American Gardening*.

## Apiarian.

For the Michigan Farmer.

### WHO IS ADAPTED TO BEEKEEPING?

All nature is now at rest but man's mind should be active in the laying of plans for the coming season. Comparatively few in the central and northern part of our State realize the profit that lies at their very doors through the proper manipulation of the honey bee.

So many feel they are not adapted to the business and have a mortal dread of the sting; others feel it is too complicated and still others feel it a sort of a luck and chance affair and don't believe they would have good luck.

But beekeeping is a science and when once one's mind is made up to go into it to win, it becomes attractive and fascinating, and especially to the lover of botany it adds a charm never before experienced.

With proper management and a location adapted to the production of blossoms it is certainly lucrative, and the advantages we have at the present time, compared with eighteen years ago when I first commenced, by way of improved hives, supers, etc., and the most excellent books and journals that are now published, all tend to make it more simple and successful.

So the adaptability depends more upon a determination to succeed than anything else. Of course if one is naturally inclined to enter any professional undertaking all the better. And while beekeeping is far from being child's play, I could cite many instances where it has been selected as an outdoor exercise, and a means of promoting health with the best of results, by those who had given up hope of assistance through the use of medicines.

How many healthy boys and girls enter our higher educational institutions, and in from three to five years find themselves physical wrecks, all for the lack of something to give vital energy while the brain is being so wrought upon. I should like to see a well kept apiary in connection with every institution of learning, similar to the one we once had at our State Agricultural College, and I think one of the mistakes of our State Board of Agriculture was taking the apiary away from the College.

It is supposed we send our boys there to learn practical and scientific farming. Entomology enters largely into the science of farming and I know under the instruction of Prof. Cook the class in entomology were greatly interested and

benefited by the college or experimental apiary.

It is thought by many to be a small industry of but little importance commercially or otherwise. This is not true, for, according to the best statistics, 110 apiarian societies, eight apiarian journals, 15 steam factories for the manufacture of beehives and apiarian implements, and numerous horse and hand power shops where a great deal of work is done are now in existence. There are at the present time in the United States 300,000 beekeepers, and according to the United States census report of 1869 there was produced in the United States 63,894,186 pounds of honey, and according to the eleventh census the honey was worth \$7,000,000 and the present estimated annual value of apiarian products is \$20,000,000, and yet it is estimated that the present existing flora of the United States could undoubtedly support, with the same average profit, ten times the number of colonies of bees it now supports. Again, this branch of agricultural industry does not impoverish the soil in the least, but, on the contrary, results in better seed and fruit crops.

### WHEN, HOW AND WHERE TO BUY BEES.

This is one of the puzzles to the beginner, when to buy. All things considered, I think the spring the best time. In the hands of the master it might pay to buy in the fall, as they can be bought much cheaper then. But a novice would not know whether they were in proper condition to winter successfully or not, or what to do in case they were not, or how to prepare them in case they needed special attention preparatory to going into winter quarters. But by purchasing in the spring, even though they cost a dollar per colony more, there is no risk to run, for with a reasonable season they will pay for themselves and there will be something left.

Last spring I established a new yard of just 100 colonies, buying the bees and paying an experienced hand \$30 a month to care for them. Strict account was kept with the yard. They increased to 130, paid for themselves, the supplies, and their care, and left a cash balance of just \$227.24. We took from the yard nearly 8,000 pounds of the finest honey I ever saw. Everything was new, bright and clean. But I have again digressed.

### WHERE TO BUY.

I would advise buying as near home as possible, to save express charges, as it is very difficult to ship small lots of bees by local freight. If you feel timid about handling them I should advise buying pure Italians, as they are more quiet than the blacks or hybrids, but if you are not I would not pay large prices for any particular strain you may see advertised in the bee journals. The honey gathered by the blacks and hybrids is just as sweet, and the quantity just as great with means that gathered by the high toned or high priced races, and no bee on earth builds such delicate combs, or caps its honey with such virgin whiteness as the poor, despised black bee.

### WHAT TO BUY.

I would advise, if possible, to buy full, strong colonies, and wherever you may live I would advise having them moved or shipped about the time apple trees bloom. Make your purchase as early as possible, but don't be in a hurry to have them moved; they are much better where they are until settled warm weather has come to stay, and the blossoms are producing nectar.

Perhaps some of you don't feel able to buy strong colonies; if not, you can buy two, three, or four-frame nuclei for less money and at less cost of transportation.

These you can build up during the season, and make good colonies of them by fall, but you could not reasonably expect much increase in number, or much surplus honey, while, on the other hand, with strong colonies you can double your spring count, and with a good season and good management get enough surplus honey to pay for the colonies you buy in the spring. I shall advise beginners to make haste slowly, and make the bees pay their way every season; then should you meet with winter losses you will be nothing out but your time, and will have your experience, hives and combs left to begin with another spring, all of which you will find valuable.

### HOW TO ORDER.

In making your purchase don't think of buying in heavy hives, especially if you have to ship any great distance, as the express on the hive would be more than its cost. In the first place decide upon how many colonies you are going to start in with, then from your nearest responsible dealer order two hives for each colony you are going to get and two supers for each hive. Get one of these hives and supers made up and the rest in the flat and put them up yourself, and thus save expense and get your first lesson in beekeeping. I shall strongly urge the use of a double-walled hive for the latitude of Michigan, and the Hoffman frame and regular Langstroth size.

Then make your inquiry something like this. I want five colonies of bees on standard Hoffman frames to be shipped in light shipping boxes. What will you deliver them at my express office for, per colony, safe arrival guaranteed? You set the time of shipment. By so doing you will run no risk and know just what they will cost you. Having had years of experience in buying and selling bees, I feel I know whereof I speak.

These light shipping boxes, although they cost you nothing, come very handy. I frequently use them in hiving swarms, and should you be out of empty hives, you can leave a colony in them a few days until you can get a hive.

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**MICHIGAN FARMER Detroit, Mich.**



## Farmers' Clubs.

CONDUCTED BY A. C. BIRD.

All correspondence for this department should be addressed to A. C. Bird, Highland, Mich.

### THE LEGISLATURE.

The present legislature begins its session under peculiar, yet desirable conditions. For the first time in over three decades, the people are thoroughly aroused as to the importance of the work they have intrusted to its charge, and in almost every home in Michigan its actions will be thoroughly and understandingly discussed and judgment passed upon them.

To the student of social development the great change that has taken place in this respect during the past two years is truly encouraging. The intellectual atmosphere of inquiry into the acts of the officials into whose hands responsible powers are delegated has permeated into every portion of the commonwealth.

The farmers and all other business men, as well as the politician and corporation magnate, are determined to scan with critical eye every act of the law-making body which affects their interests. This is as it should be, and no honest legislator will suffer from such conditions. Let this spirit of honest interest on the part of the people be encouraged. Let those whom the people trust, in turn trust the people. They may safely do so, and they will not find the people slow to appreciate the true merit of their actions.

Great questions are to come up before this legislature, perhaps greater than have been considered by any similar body in this State for a score of years, and this condition of general interest in legislative action on these questions should be a source of congratulation, as well to the legislators as to the people themselves.

For almost the first time the people will come practically united in asking for the enactment of certain measures where the interests of the many will conflict with the interests of the few, and the fact that these measures have already met with honest and fair consideration in almost every Farmers' Club in Michigan, in almost every Grange, in almost every association where men have met for mutual counsel, and in fact in almost every home within the borders of this commonwealth, should rejoice the heart of every legislator who believes that popular will should rule.

A. C. BIRD.

### LET THERE BE NO SECTIONALISM.

There seems to be a tendency among some of the newspapers of the Northern Peninsula to arouse sectional feeling with regard to legislative appropriations for State institutions. This is all wrong. And it is to be hoped that the feeling will be confined to the few papers which have already given expression to this false and dangerous idea.

Although the interests of this State are very diverse, from natural causes, yet it should never be forgotten that we are all united under one common State government, and that the same practical test should be applied to all our public institutions regardless of their location.

If the State institutions located in the Upper Peninsula are to be continued they must stand the same practical test of merit which is demanded of similar institutions in the Lower Peninsula, nothing more and nothing less. But this test must in no sense be made more severe in the one section than in the other.

Regardless of the ill-considered comments of the Upper Peninsula press, the great question is not, Are these institutions located above the Straits of Mackinaw? but, Have they, after a fair test, demonstrated their right to maintenance at public expense? Let this test, and this alone, determine the action of the legislature, not only when appropriations for the State institutions of the Upper Peninsula are under consideration, but as well when adequate and just support for the institutions south of the Straits is to be determined. Let the same test be applied to the prison at Marquette that is applied to the one at Jackson, and the same to the Mining School that is considered proper with regard to the University, the Agricultural College, and the Normal Schools.

Such is the position the Farmers' Clubs have steadfastly maintained, and these grounds are impregnable.

A. C. BIRD.

### SECRETARY'S ANNUAL REPORT AT STATE ASSOCIATION CONVENTION.

The work the past year has been to continue that of my predecessors, organizing new clubs wherever possible and securing the enrollment of all the clubs not already on the list, and for the short time for organization that we have had it is very gratifying to say that a large number were formed after our last annual meeting, Feb. 5 and 6, and a goodly number have started this fall. I can assure you that much of our success has come from the work of Mr. A. C. Bird, in the MICHIGAN FARMER, the publishers of which so generously engaged him to conduct our Associated Farmers' Club Department, without one bit of expense to the association. I am positive that you realize the amount of good that has come from this source. On March 12, Messrs. Bird, H. B. Cannon and myself as a committee met at Wixom and invited Pres. Kimmis to meet with us for the purpose of formulating a set of questions which has, in the main, been fully discussed by the local clubs. We also decided, at that time, to adopt the proposition that had been made to Mr. Bird.

On Oct. 12 the executive committee met at Lansing with Pres. Kimmis, J. T. Daniels, W. H. Howlett, F. M. Shepard, and B. F. Peckham were present, also Mr. Bird by invitation was present. We adopted the eight principles and formulated the program, which is before you for your consideration.

The coming year will be a very important one, and much work will devolve upon my successor. I would make the following suggestions:

That every local club shall, upon the annual election of officers, notify the secretary of this association of the name and address of its corresponding secretary.

And I deem it wise, from this time on, that the delegates shall have properly certified credentials, and that the delegates shall be elected at least fifteen days before the annual meeting, and that the secretary be notified upon their election.

B. F. PECKHAM,  
Secretary State Association of Farmers' Clubs.

### TREASURER'S ANNUAL REPORT AT STATE ASSOCIATION CONVENTION.

Feb. 6, 1896, Balance received from Sec.

Kimmis.....\$15 20

Membership fees during year.....66 00

Total receipts for year.....81 20

Secretary's stationery.....\$ 4 00

Postage.....9 84

President's postage and stationery.....5 43

Printing 500 circulars.....4 00

" 200 letters.....2 25

" 200 receipts.....2 00

" 500 programs.....6 50

Railroad agent, for reduced rates.....2 50

Plane for annual meeting.....4 00

Mrs. Johnstone's expenses.....6 80

Total expenditures for year.....\$47 32

Balance to Sec. Wells, Dec. 9, 1896.....\$33 88

B. F. PECKHAM,  
Treasurer State Association.

### THE ASSOCIATION WORK FOR THE COMING YEAR.

When it is remembered that the State Association of Farmers' Clubs was organized on Feb. 1st, 1894—less than three years since—and that its growth in numbers, in strength and usefulness has been marvelous, it affords—to those through whose efforts this most desirable condition has been brought about—grounds for rejoicing, and in this rejoicing all friends of the association will share. This growth, though so rapid, has been a healthful growth, and those through whose fostering care the association has reached its present condition of usefulness, are entitled to the gratitude of every farmer in Michigan, be he a member of a farmers' club or not.

The past year has witnessed a great work done by the local clubs throughout the State, centralized in their State Association and thus showing what "organized effort" may do when properly directed.

The Association meeting held at the State Capitol on Dec. 7th and 8th, last, gave the first test to its real strength, while the ultimate test will come when the measures there adopted come before the legislature for consideration. This much is retrospection. And now as to the work of the coming year. What shall be the nature of that work and what shall be the measure of success attending the work? The answer to these questions must be determined, in a large degree, by the local clubs.

The past years have been those of preparation, very largely, and now the harvest is just before us. Shall we not gather in the ripened sheaves? If the clubs in the several counties of the State will but see that their respective members of the legislature are made fully acquainted with the measures asked for by the State Association, and insist that we are fully in earnest and that we are not asking for "class legislation," the results will not be disappointing.

It is earnestly hoped by the officers of the State Association that no efforts will be spared by the 250 local clubs in the State, to make the year just entered upon, one of great advancement in both local and in association work.

The State Association has hitherto been very fortunate in the selection of its officers. They have been active and faithful—giving of their time and efforts, and that without stint.

The present officers, while seeking to emulate the example thus placed before them,

will hope to do their full share in the duties assigned them as the work of the year unfolds.

An able and judicious committee has charge of the selection and presentation of such association questions as they may deem most advisable for discussion by the local clubs during the coming twelve months. It is hoped that no club will fail to discuss these questions at the regular meetings for which they are assigned.

And now may the coming year bring mental, moral, social and financial good—and that in large measure—not alone to our State Association, but to every member of a farmers' club in this beautiful "Peninsular State."

J. T. DANIELLS.

### ADDRESS OF PRESIDENT KIMMIS

This week we print in full the interesting and well considered address of President A. N. Kimmis, which was received with such general approval at the late meeting of the Associated Clubs:

On the fourth day of February, 1894, delegates from about twenty-five farmers' clubs in the State of Michigan assembled in this chamber for the purpose of considering the advisability of forming a central or State organization. As a result of their deliberations there came into existence an organization which has challenged the attention of the people of Michigan and the fame of which has spread throughout the Union. From many states and different parts of Canada have come inquiries concerning the Michigan State Association of Farmers' Clubs, its methods and purposes.

When five delegates retired to yonder room for the purpose of framing a constitution and by-laws for the proposed organization, they carried with them five more or less clearly defined, but radically different opinions concerning the direction which should be given the new movement. The central idea was to secure a co-operation of the clubs of the State in an effort to benefit the farmer, but just what should be undertaken and the exact manner of procedure were questions concerning which there was not unity of opinion. The constitution, as finally reported to the convention, was broad enough to permit any line of effort that can be deemed of benefit to the farmer. Every delegate present discovered in its terms a provision that would allow him to press the particular policy he deemed most important. It declared as its purpose the uplifting of the farmer in social, moral, intellectual and financial condition. What effort for the accomplishment of good may not find sanction under such a declaration of purpose? In no one of the four fields, social, moral, intellectual, financial improvement, has the work of this association been barren of results.

Recognizing the fact that the accomplishment of the first three, namely, social, moral, intellectual advancement, was the inevitable result of good local club work, the association wisely turned its attention during the first year to the encouragement of local organization. The number of clubs in Michigan nearly quadrupled in the twelve months succeeding the establishment of the State association, nor will any unprejudiced person deny this association the credit of being the potent factor in accomplishing this wonderful result. Keeping the result in mind, contrast the condition of the members of your local club with their condition at the time of its organization, estimate if possible the value of the blessings that have come to them because of its influence and then ask, has the association paid? If the organization of so large a number of local clubs, with all their attending benefits, is attributable to this association, with what satisfaction may those who have labored so industriously in this cause contemplate the results thus far attained.

If this association had accomplished no more than has already been enumerated it would have amply justified its right to exist. It has done more.

While the local club is potent in elevating the social, moral and intellectual condition of its members and thus indirectly conferring financial benefit, it could never hope to succeed in such an interference in the conduct of public affairs as would result in a direct cash saving to the taxpayers. This the State association has attempted and it can point, even now, to results accomplished. While our constitution is broad enough to admit and justify effort in many fields, it has been the policy of this association to determine, first, from which direction came the most imperative demand for our effort and then to concentrate the power of the association for the accomplishment of desired results. Before the last annual meeting there was general complaint that taxes were almost unendurably high. The protest was so vigorous and long continued that the executive committee of this association decided that in no way could it render greater service to the people in general and farmers in particular, than by an effort to reduce taxation. Accordingly, the call for the last annual meeting was a suggestion that the association should enter upon an inquiry as to how this result could be accomplished. The action of that committee was endorsed by the association and the work of the last annual meeting was devoted largely to an inquiry into the causes of our burdensome tax levy. The local clubs have during the past year continued this investigation. That the lines pursued by the local clubs have been parallel and their conclusions so nearly a unit, is due in large measure to the efficient aid rendered the association by our department in the MICHIGAN FARMER which has been so ably and fearlessly conducted by our honored ex-president. Too much praise cannot be bestowed upon Mr. Bird for the service he has rendered this

association. As a result we are met in annual convention with clearly defined ideas concerning the specific changes which should be made in the conduct of public affairs to the end that taxation may be reduced. This purpose of reducing taxation comes up as unfinished business and should have precedence in our deliberations. We shall now make public declaration of our conclusions and desires, and determine the means which we shall adopt to secure a compliance with our demands.

Your executive committee has endorsed and recommended for your adoption, eight succinct propositions relating to the conduct of public affairs. They believe that the practical application of them would result in an annual saving to the taxpayers of more than half a million dollars. This declaration of principles is the outgrowth of the discussions of public matters which have been the prominent feature of association and local club work. They are doubtless familiar to you, yet are of so great importance as to demand enumeration here. They are as follows:

First—That all county officials shall be paid in full for their respective services by stated salaries fixed by the respective Boards of Supervisors; and that it be made a criminal offence for such officials to receive any fees, or other perquisites in addition to their salaries.

Further, that the fees collected in county offices be readjusted on an equitable basis, and that hereafter, all such fees be turned into the county treasury and become a part of the general fund.

Second—That no new State institutions be established by the next legislature, and that there be a general weeding out of the unprofitable State institutions already in existence, and of unbusiness-like methods of management wherever they exist.

Third—That Michigan prisons should, in the aggregate, be made self-supporting.

Fourth—That provision be made whereby the estates of the insane, or those parties legally responsible for their support, shall contribute either in full or in part, as the circumstances shall warrant, toward the maintenance of said insane when confined in the public asylums.

Fifth—That not more than the regular one-sixth mill tax be granted to the University for the coming two years.

Sixth—That no changes be made in our road laws whereby the maintenance of our roads shall be made more burdensome than at present.

Seventh—That a more economical and effective system for the collection of taxes upon non-resident land must be devised.

Eighth—That our tax system be so amended as to secure a more equitable distribution of the burdens of taxation upon both personal property and real estate, and upon both corporate and private capital.

Every thinking person admits that the accomplishment of some of the results therein set forth as desirable, will require the best effort of the best intellect on the part of those who legislate and those who execute, and if the progress seems to be slow, we should be patient so long as we are convinced that men of ability are honestly striving. Honesty of purpose, however, is not enough. We have a right to demand that those to whom we must look for the solution of these problems shall possess unswerving honesty and large ability. On the other hand, there are among these principles some which are easily to be accomplished. The simple publication of the facts bearing upon one of them, sustained in some instances by the influence of local clubs, has resulted in a direct cash saving in many counties, aggregating more than \$5,000,000. We may not succeed at once in accomplishing all we desire, but some measure of success already crowns our effort. Our progress in the immediate future depends in large measure upon how thoroughly the local clubs performed the work recommended at our last annual meeting in relation to nominations for legislative offices. At our last annual meeting the association endorsed the action of the State in returning to the original plan of compiling and printing its own laws. Any other manner of procedure is believed to be contrary to the constitution of Michigan. If the State had never departed from the constitutional method there would have been saved, at a very conservative estimate, at least \$100,000 to the treasury, while the amount extorted from those who were compelled to own the compilation cannot be estimated, but must have been very large. There will doubtless be great influence brought to bear upon the next legislature to induce an abandonment of the wise plan now in process of execution. The completion of the good work will require affirmative action by the legislature. This matter is of great importance to the taxpayer, for its influence extends over a series of years, affecting not only the treasury of the State, but the pocket of every man who buys a copy of our laws. The importance of this matter grows upon one when he remembers that ignorance of the law excuses no one. A copy of them should be within easy reach of every person. For some years past the only way to secure a copy has been to pay an exorbitant price to a corporation or firm residing outside the State. The new plan, or rather the constitutional plan, is for the State to compile and print its own laws and supply its citizens at actual cost. The importance of this matter justifies the recommendation that the association reaffirm the resolution relating thereto, which was passed at our last annual meeting.

The avowed policy of this association is concentration and continuity of effort. A most important and well matured plan is in process of execution. How long it will require our undivided effort cannot at present be determined. Nothing therefore could be more inappropriate than to detract attention from the work in which we are now engaged by a presentation of the possibilities which lie before us. If this address seems lacking in that it presents no original plans and recommendations, be it remembered



that we have business now on hand which admits of no division of effort.

When we shall have accomplished our present undertaking we may properly enter other fields; not till then. The justification of reiterating and emphasizing the necessity of concentration is found in the history of all organized effort.

With the augmentation of power there comes, inevitably, a tendency to rush from one line of effort to another, an inclination to attempt many things, oftentimes unadvisedly. This association cannot hope to claim exemption from these universal tendencies. They are centrifugal forces, disrupting in their effect unless neutralized by their correlatives. Usually this correlative force is found in constitutional limitations; but our organization, as we have noticed, has no such limitations, hence our centripetal force must be found in the exercise of the most exacting conservatism. And such conservatism will, we believe, be exercised; not of the kind that induces men to supinely accept all existing conditions, but of the kind that shall secure the consideration of every policy, and shall demand that lines of effort be based upon carefully established facts instead of prejudice.

The successful individual must have definiteness of purpose. Labor is his balance wheel, and to secure a perfect equipoise, enabling him to control the tendency to outbursts of natural inclination and passion, that labor must be continuous and free from mutability. So, if history is to enroll our association among the few successful philanthropic organizations, it must have a definite purpose, and continuity and immutability of effort must be its distinguishing features. I used the word philanthropic advisedly. True, this is the organization of a class, but the good which we seek is not of limited application. Not one declared purpose of this association but would, if accomplished, inure to the benefit of every patriotic citizen of Michigan; and those only are objecting who are now, or who hope to be, the recipients of an unjust bounty. It is the absence of selfishness, the broad benevolence of our purposes which entitles us to use the word philanthropic, and has won the approbation of the public. We may well be proud that good citizens everywhere, residents and non-residents of Michigan, all who understand our purposes, are anxious for the success of our association. These considerations must impress every delegate with the responsibility of his position. The immediate future of this association is absolutely in your hands, and all its future depends largely upon the action of this convention. Let us avoid extravagance of expression. If any delegate is harboring feelings other than those of broadest charity and benevolence for all mankind, let him keep them safely confined in his own breast. We must keep clear of entanglement with questions which have become partisan; we have to do with other measures and with individuals, not with parties. Should there be a disposition to dwarf this association by committing it to the advocacy of measures which will be of benefit to the farmers alone, let it be remembered that selfishness is alike destructive of all that is best in the individual or the organization; that classism is of all evils most to be avoided, because it is unjust, and because its most baneful influence is felt by those whom it purports to benefit. As in the past, so in the future, let us have none of it. Any other policy will surely alienate the sympathy which we now so richly enjoy.

The most critical period in the life of the individual is when he first becomes conscious of his power. As an association we stand in that position to-day, and if we escape error and possible disaster, our motion must be regulated by the balance wheel of conservatism. If our work has thus far been largely experimental, it will be no less so in the future. In vain shall we look to the past for analogies to guide us, for in the rapid evolution of to-day, past conditions, in ensemble, find no repetition.

The charge of having exceeded his authority in some matters may truthfully be brought against your presiding officer. His only justification is the fact that the results of such transgressions have been of undeniable benefit to the association.

The difficulties attendant upon the present position of our association are most fully appreciated by those who are giving most thought and are contributing most of time and energy for its success.

Our last annual meeting demonstrated the fact that this association can harmoniously discuss questions of such nature as are likely to come before us for determination at this meeting. Your resolutions are but the expression of your desires; much more important are the plans you make for the purpose of securing a compliance with those requests.

In the discharge of the duties which devolve upon the presiding officer, I shall claim and shall doubtless receive your hearty co-operation in all efforts to maintain that temperance of discussion and courteous observance of individual rights which should characterize our deliberations. An abiding faith in the wisdom, earnestness and good sense of the delegates here assembled, begets a confidence that in your final conclusions there will be found no evidence of that unseemly radicalism which is a hindrance rather than an aid to the equitable adjustment of affairs.

A. N. KIMMIS JR.

#### REPORTS FROM LOCAL CLUBS.

##### OXFORD FARMERS' CLUB.

The Oxford Farmers' Club held its last meeting at the residence of Jacob L. Loomis on December 26th. There was a fair attendance and much interest shown in the work. The exercises opened with

the singing of the club's favorite song "America."

J. G. Noble, one of the delegates to the State Association, being called upon to make a report of the annual meeting at Lansing responded at considerable length. One feature of his report was a criticism on the press reports, especially those in the Detroit papers, which he thought failed to do justice to the work done at the meeting. The papers in question gave Professor Thompson's paper on the University in full, with favorable comments, but did not mention the able and brilliant defense of the principle of the Association demanding that the University should not receive more than the regular one-sixth mill appropriation during the next two years. The debate over this question was eloquently and forcibly led by A. C. Bird, of Oakland county, who met the adroitly worded questions of the Professor in a convincing and masterly manner. Mr. Bird was strongly assisted by Messrs. Platt, of Washtenaw, Lockwood, of Monroe, Whitmeyer, of Ionia and others. Mr. Noble stated that it was a pleasure to him to be a witness of the fact that Michigan possessed farmers who were able to successfully cope with the distinguished head of the law department of the University.

Another feature of our delegate's report was the very evident desire on the part of our State institutions to possess the friendship of the farmers' associations of Michigan. It shows that our efforts in our chosen line of improvement are respected and appreciated by thoughtful people. And in consequence it should be the first concern of the farmers' associations of the State not only to hold to the esteem and influence they now possess, but by a prudent consideration and study of events, to be able to enlarge our usefulness to the cause.

The club question for discussion was, What occupations are detrimental to the farmer?

O. D. Loomis in opening claimed that the manufacturer of bogus butter comes into competition with legitimate dairying, and is consequently a great damage. Also that the extended use of electricity has destroyed the business of those engaged in breeding horses. Also that the demand for oats and corn had been, in consequence, greatly curtailed.

Jacob Loomis took practically the same ground.

Mr. Cowdin thought all the existing occupations were directly or indirectly useful to the farmer. Even the brewery and distillery make a market for the farmer's grain. Boards of trade, so freely condemned, help extend the market for the farmer's produce. And the operations on Wall St. are beneficial in the way of enabling enterprises requiring great amounts of capital to be promoted. Questionable things are sometimes done, but on the whole these occupations are needed. He then left the question to suggest the feasibility of taxing the owners of bicycles one dollar a year, and we all smiled our approval.

Mrs. A. D. Jones thought the breweries and distilleries could be done away with and the millions of dollars now annually spent for drink would help to boom the prices of farm produce.

Our president, M. L. Frink, mentioned the matter of pure food, and also the irrigation schemes which come annually before Congress. He claimed that the appropriation of the people's money by Congress, to be used to prepare more land to produce in competition with our own under the existing low prices, would be a crime against the toiling producers of the country. His views were endorsed by the members for the reasons given and also for the further reason that these irrigation schemes are backed by railroad corporations who own large quantities of this arid land and who are trying to have the government make it salable for them.

The next meeting will be held at H. W. Hollister's on January 30th. REPORTER.

##### VASSAR FARMERS' CLUB.

The Vassar Farmers' Club held its first regular meeting at the home of Mr. and Mrs. C. S. Johnson, Dec. 17th, 1896.

After doing justice to a bountiful dinner, the club was called to order by the President, and we first listened to the report of the annual meeting of the State Association by our delegate, C. S. Johnson, which was very complete and was unanimously accepted.

The club proceeded to complete its organization, and with the exception of one or two amendments, adopted the constitution and by-laws as sent out by the State Association.

A poem was very nicely rendered by Miss Bertha Ridgeman and was highly applauded.

C. S. Johnson spoke at some length of his visit to the Agricultural College while in attendance at the State meeting, and said he had never before realized what a grand institution the College is for the farmers of Michigan. Of the special courses in dairying, etc., he spoke very highly, and thought that every farmer should visit the College and see for himself what a grand work is being done.

A motion prevailed that our regular meetings be held the third Thursday in each month. Our first regular meeting adjourned with a membership of twenty-three.

W. T. LEWIS, Cor. Sec.

##### LENOX AND CHESTERFIELD.

The Farmers' Club of Lenox and Chesterfield met Dec. 18th, at the home of Henry Seaman in Chesterfield. About forty members and visitors partook of dinner, and duly enjoyed the oysters which regularly form a part of the bill of fare at each December dinner.

The annual election of officers resulted as follows: President, Charles Woodruff; Vice-President, Charles Lee; Secretary, Mrs. S. N. Roberts; Treasurer, Mrs. Henry Seaman.

Mr. Shattuck on retiring from the chair thanked the club for standing by and sup-

porting him, and expressed his appreciation of the services of Mr. J. S. Crawford, the retiring Vice-President.

The short December afternoon was so far advanced there was no discussion of questions, but on motion of Mr. Parker the following question was submitted for discussion at the club meeting in January: Is there any better method than the one in common use of constructing the public highway? If so, ought such a method to be adopted?

The club adjourned to meet at the home of Andrew Hart, Chesterfield, on the last Friday in January, 1897.

MRS. S. N. ROBERTS, Cor. Sec'y.

##### WEST FRANKLIN AND EAST CAMBRIDGE FARMERS' CLUB.

About one hundred people, farmers and their families, met at the pleasant home of M. E. Case, on the second Saturday in December, for a day of business and social pleasure.

The club proceeded to elect officers for the ensuing year, as follows: the majority of the old officers being re-elected: President, A. J. Case; secretary, Claudia Case; treasurer, Mrs. Cecil Rogers; organist, Mrs. A. J. Case; chaplain, Rev. S. D. Wellwood; executive committee, M. E. Case, Mrs. R. L. Rogers, Mrs. L. M. German; corresponding secretary, Mrs. L. W. German.

Bountiful refreshments were then served, followed by a general program. A paper was read by Miss Eva Lewis on "Shopping by Mail," which was followed by a spirited discussion. Some maintained that the practice tended to discourage local dealers, ruin their business and cripple the growth of small towns. Many, however, were strongly in favor of shopping by mail.

H. C. Daniels read a paper on "Good Roads." Every one was awake at once, and in the discussion which followed it was made very plain that the farmers wish the present road management to continue. They think that, as a rule, farmers know what is good for them, and will see that every man does his share while working out his road tax instead of telling long stories in the shade or bringing loads of tools which formerly did wonders. The farmers of this vicinity often donate work in order to finish off a piece of road in a proper manner.

The subject of coloring bogus butter was mentioned, and our representatives at Lansing will quite likely be memorialized on that subject soon.

The club adjourned to meet at the residence of Wm. Fridd, in Franklin, Saturday, January 9, 1897. REPORTER.

##### WEST AVON FARMERS' CLUB.

The West Avon Farmers' Club met at the home of O. H. P. Griggs. The day being stormy, but few members were present.

The subject, "Should our State prisons and reform schools be self-supporting?" was talked upon, the discussion being opened by Vice-President B. J. Fuller who read an able paper in support of making these institutions self-supporting. He was opposed to educating criminals.

O. H. P. Griggs gave an interesting account of how the work is carried on at our State prison. He thought that if the State can carry on the work with the same diligence that contractors do, the prisons might be made self-supporting; if not they had better be left alone.

L. C. Flummerfelt thought it would be impossible to hire any one who would or could take the interest in it that a contractor does in his own work.

William Catcher visited the State prison in 1888. He said the men then worked the hardest of any men he ever saw, and thought there had been a great change since then in this respect. He also thinks farmers pay more than their share of State and county tax, and remarked that if foreign criminals continue to come to this country, we shall need more prisons and have more taxes to pay.

C. R. Cook thinks that all State institutions should be made self-supporting as far as possible. He thinks the saloon accountable for most crimes, and that as long as we license the saloon we should care for the criminals we make, and not be too particular about expenses.

MRS. L. W. FISHER, Cor. Sec'y.

**FARMER'S TOOL CHEST.**—A good tool chest is almost a necessity to every well regulated farm, but very few farmers have one, in fact we believe nearly one-half the money spent by farmers for the smaller tools is often thrown away, for two reasons; the first is, in the country it is hard to get tools of first-class quality, and the second is that most farmers have no convenient place to keep them, so their tools get battered up, scattered around and eventually are lost, or become useless.

If you want a chest of good tools, our friends, the Powell Fertilizer and Chemical Company, Baltimore, Md., have solved the Tool Chest problem most satisfactorily, and we think if you will read their offer as made in their advertisement published in this issue you will investigate their plan for getting a Tool Chest free.

##### THE YOUTH'S COMPANION CALENDAR.

The Youth's Companion Art Calendar for '97 has just made its appearance, and a delightfully original and artistic one it is, too. It is printed in twelve colors, making a true reproduction of the original water-color paintings. The size is 10½ by 24 inches. It is arranged in four panels, each containing a full-length picture of a beautiful maiden most becomingly and appropriately attired for the season she represents. This beautiful Calendar is given free to all new subscribers to the Companion for '97, and to all old subscribers who renew and pay their subscriptions for '97. Illustrated Prospectus of Volume for the year '97 sent free on application. Address The Youth's Companion, 207 Columbus Avenue, Boston, Mass.

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Is often a warning that the liver is torpid or inactive. For a prompt, efficient cure take

## Hood's Pills

Which rouse the liver and restore full, regular action of the bowels; do not gripe. 25c.

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**NORNA**

## Our Combination List.

We have arranged the following clubbing list with a view of giving our subscribers the best papers published and at a price that will save money.

Present subscribers to any of these papers can order the combination they desire and have their present subscription dated one year ahead.

No orders for other papers will be received unless accompanied by an order for the MICHIGAN FARMER.

We will be pleased to quote prices to those parties desiring more than one paper in the following list.

The first column gives the price at which we will receive orders for both papers one year. The second column gives regular price of two papers.

Agents should see our agents' terms for commission on these combinations:

Name of paper.	Combination price of two papers.	Regular price of two papers.
Free Press, Detroit, semi-weekly.....	\$1.40	\$2.00
Journal, Detroit, semi-weekly.....	1.40	2.00
Tribune, Detroit, weekly.....	1.10	1.75
Enquirer, Cincinnati, O., weekly.....	1.10	1.50
Commercial-Gazette, Cincinnati, O., weekly.....	1.10	1.50
Tribune, New York, weekly.....	1.50	2.00
World, New York, tri-weekly.....	1.50	2.00
Blade, Toledo, O., weekly.....	1.45	2.00
Inter-Ocean, Chicago, Ill., weekly.....	1.50	2.00
Board of Trade, Ft. Atkinson, Wis., weekly.....	1.50	2.00
Jersey Bulletin, Indianapolis, Ind., weekly.....	2.25	3.00
Holstein-Friesian Register, Brattleboro, Vt., semi-monthly.....	1.50	2.00
Swine Breeder's Journal, Indianapolis, Ind., semi-monthly.....	1.40	2.00
Gleanings in Bee Culture, semi-monthly.....	1.10	1.50
American Swineherd, Chicago, Ill., monthly.....	1.20	1.50
American Sheep Breeder, Chicago, Ill., mo. ....	1.20	1.50
Ohio Poultry Journal, Dayton, O., monthly.....	1.35	1.65
Cosmopolitan, New York, monthly.....	1.50	2.00
Household, Boston, Mass., monthly.....	1.50	2.00
Democrat's New York, monthly.....	2.50	3.00
Woman's Magazine, New York, monthly.....	1.50	2.00
Ladies' Home Journal, monthly.....	1.70	2.00
Breeders' Gazette, Chicago, weekly.....	2.00	3.00
Peterson's Magazine, New York, monthly.....	1.45	2.00
<b>LOCAL MICHIGAN PAPERS.</b>		
Ann Arbor Courier.....	1.75	2.00
Athens Times.....	1.75	2.00
Alpena Pioneer.....	1.75	2.00
Alma Record.....	1.50	2.00
Adrian Press.....	2.00	2.50
Allegan Democrat.....	1.75	2.25
Ann Arbor Argus.....	1.75	2.00
Athens Bee.....	1.50	2.00
Buchanan Independent.....	1.75	2.25
Benton Harbor Banner-Register.....	1.75	2.00
Burr Oak Acorn.....	1.75	2.00
Beulah Breeze.....	1.75	2.00
Bangor Breeze.....	1.50	2.00
Bronx Journal.....	1.50	2.00
Cass City Enterprise.....	1.75	2.00
Cape May Courier.....	1.75	2.00
Concord Independent.....	1.55	2.00
Carson City Gazette.....	1.60	2.00
Corunna Independent.....	1.25	1.75
Centerville Observer.....	1.75	2.00
Dowagiac Standard.....	1.75	2.00
Dorr Record.....	1.60	2.00
Dexter Leader.....	1.75	2.00
Kalamazoo Journal.....	2.00	2.50
Empire Leader.....	1.50	2.25
Evart Review.....	1.75	2.25
Fenton Courier.....	1.75	2.00
Flushing Observer.....	1.75	2.00
Freeport Herald.....	1.75	2.00
Fennville Herald.....	1.75	2.00
Fenton Independent.....	1.75	2.00
Greenville Independent.....	1.75	2.25
Greenville Democrat.....	1.75	2.00
Grand Lodge Republican.....	1.75	2.00
Grayling Avalanche.....	1.75	2.00
Grand Lodge Independent.....	1.25	2.00
Homer Index.....	1.50	2.00
Hastings Herald.....	1.25	1.75
Howell Republican.....	1.75	2.00
Homer Vidette.....	1.50	2.00
Hilldale Standard.....	1.75	2.00
Harrietta News.....	1.75	2.00
Hartford Alliance.....	1.75	2.00
Howell Herald.....	1.75	2.00
Ithaca Herald.....	1.75	2.00
Ithaca Journal.....	1.75	2.00
Ionia Sentinel.....	1.50	2.00
Kalamazoo News.....	1.45	2.00
Laingsburg News.....	1.50	1.75
Lapeer Clarion.....	1.60	2.00
Lowell Ledger.....	1.60	2.00
Morley Tribune.....	1.75	2.00
Milan Leader.....	1.75	2.00
McBride Review.....	1.60	2.00
Mt. Pleasant Tribune.....	2.00	2.00
Muir Tribune.....	1.50	2.00
Mt. Clemens Monitor.....	2.10	3.00
Millington Retina.....	1.00	1.50
New Buffalo Telephone.....	1.50	2.00
North Lansing Record.....	1.75	2.00
Orion Review.....	1.75	2.00
Ovid Register-Union.....	1.45	2.00
Oxford Review.....	1.75	2.00
Owosso Argus.....	1.50	2.00
Otter Lake Prohibition News.....	1.10	1.50
Otter Lake Enterprise.....	1.10	1.50
Otisville Record.....	1.10	1.50
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## Veterinary Department.

CONDUCTED BY DR. W. C. FAIR.

Advice through this department is free to our subscribers. Each communication should state history and symptoms of the case fully; also name and address of the writer. The initials will only be given. When an answer is requested by mail it becomes private practice, and a fee of fifty cents must accompany the letter.

**SPASMODIC COLIC.**—I have a young mare that takes colic very often. She does not bloat. W. G., Adrian, Mich.—Change her feed: give half an ounce ground ginger in feed three times a day for one week, then give one-half the dose until she is well.

**WINDGALLS.**—My five-year-old horse has windgalls on all four legs; he is not lame; the puffs are small. What do you advise me to do for him? H. A. W., South Bend, Ind.—If your horse were mine, I should leave him alone until he either went lame or the puffs enlarged and became hard.

**SITFAST.**—I have a horse that has a hard callous on his shoulder. The result of a bruise from collar. It took me one year to heal the sore. Now I would like to know how to remove the callous. J. T., Goodison, Mich.—Drugs will not reduce the kind of swelling your horse has on shoulder. You will have to either cut it out or have it done; then it will soon heal.

**MALIGNANT SORE.**—I have a work mare six years old that has a running sore on belly. Has been there for the last two months. Veterinary calls it a wen. She eats well but rubs and bites herself. Her hind ankles stock. B. D. W., Paw Paw, Mich.—Apply two ounces of oxide of zinc and four ounces tannic acid to sore twice a day for two weeks. Then apply iodoform once a day until it is healed.

**INTESTINAL PARASITES.**—I have some lambs that I am feeding and they are not doing well. Some of them are not growing. They cough considerable and seem to rattle when they breathe. They had scours when I got them. They got better but their manure smells bad. Don't eat well. W. A. B., Leslie, Mich.—Give your lambs equal parts powdered area nut, ground gentian and ginger in feed. You do not state their age. One full teaspoonful is a dose for a full-grown sheep given twice a day. There is no danger from feeding it in large doses for a few days.

**PARTIAL PARALYSIS.**—My pigs are weak in hind legs; will stand up for a few moments, then fall over on haunches; remain that way for a minute or so, then stand on feet again, and then fall over again. Don't seem to make any difference which way they fall. Their legs drag behind. Don't seem to be in any distress; eat well and look well. Have been ailing about a month. They have plenty of exercise and a good dry place to sleep; are fed corn and milk. They are about three months old. D. D., Willis, Mich.—Your pigs suffer from partial paralysis, caused from feeding too much grain. Give them less feed; also give epsom salts to purge them. Give ground gentian root and sulphate of iron in feed. They may possibly have worms, causing their loss of power.

**WORMS—FLATULENT COLIC.**—I have a mare eight years old that has spells of flatulent colic. Bloats badly; has an attack about once in four weeks. Gets relief from a good physic and injections to remove gas. Has good appetite and bowels are generally loose. After having an attack she passes worms from six to twelve inches long and as large as a good-sized lead pencil. I have tried several worm remedies to no effect. She is a valuable mare and I do not care to lose her. What causes her sickness and what is the remedy? W. H. Z., Edgewood, Mich.—Give one dram santolin and half an ounce ground gentian in feed once a day. Also give half an ounce powdered area nut once a day. Give her plenty feed and a liberal amount of salt.

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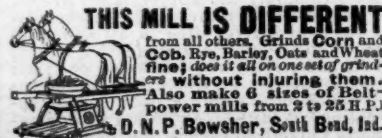
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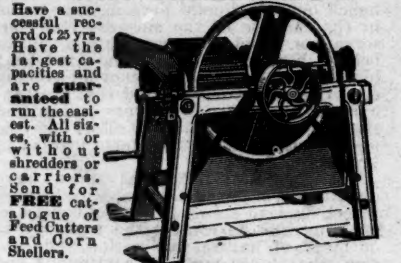


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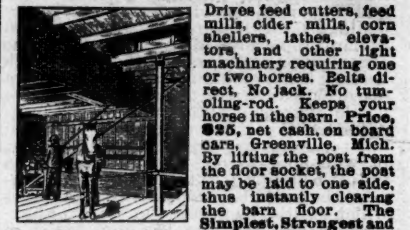
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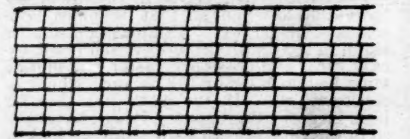


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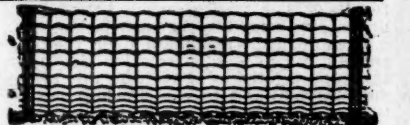
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